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SWEET WILLIAMS.

PAINTED FOR
JAMES VICK
SEEDSMAN.



DECEMBER, 1887.

THE WEATHER and the crops of the past season are worthy of special notice now, at the close of the year. The spring, at the North, opened later than the average season, but progressed steadily and with a fair amount of rain, giving a fine promise to cultivators of all kinds of crops. Although different parts of the country have been visited with cyclones, tornadoes and heavy winds, yet their number has been less than for several years past, and these have been, for the most part at least, at times of great solar disturbances; continued and careful observations show these coincidences to be so constant that by all well informed people they are now coming to be considered in the undoubted relation of cause and effect. This principle of meteorology is becoming so firmly established, in the face of all opposition and ridicule by misinformed persons, that it will in the near future be accepted as of fundamental importance in observations of the weather.

With the first summer month a drought began to prevail in some parts of the west and southwest, and as the summer advanced one crop after another felt its effects and exhibited results that disappointed thousands of fruit-growers, gardeners and farmers. The quantity of Strawberries sent to market at the west was greatly reduced in consequence of

the lack of rains, and Raspberries and other small fruits suffered similarly. In the Atlantic States there was an abundance of rain, in fact, an over-supply, so great as to be damaging to some extent.

The great grain crops of the west have fallen much below the average this season, and the yield of Potatoes is less. With the exception of this State and New England the Apple crop amounts to little or nothing. In some cases, where the trees were fairly well set with fruit the drought caused it to fall, as the trees could not obtain sufficient moisture to carry it. The dry weather has also been extremely favorable to the breeding of insects, which have extensively damaged fruits, grains and vegetables of some kinds. The vineyards of the eastern seaboard region have been largely despoiled of their fruit by mildew and rot, resulting in part from excessive moisture. Too much rain has also injured the Cotton crop so that it promises to fall considerably below the average. The importance to agriculturists of a water supply on the one hand, and of good drainage on the other, have been so practically and expensively demonstrated that the lesson will not be easily forgotten, and in some cases may result in important improvements. In this particular locality the drought has been less severe than farther west, yet it has greatly reduced the most

of our crops. Many instances during the season have served to indicate the strong contrast between poor and good cultivation, which at such a time are seen in the strongest light. Frequent stirring of the soil has enabled a fair crop to be made, when with the other conditions similar, and the lightest cultivation, the result has been very poor.



GRANDIFLORA SUPERBISSIMA INIMITABLE.

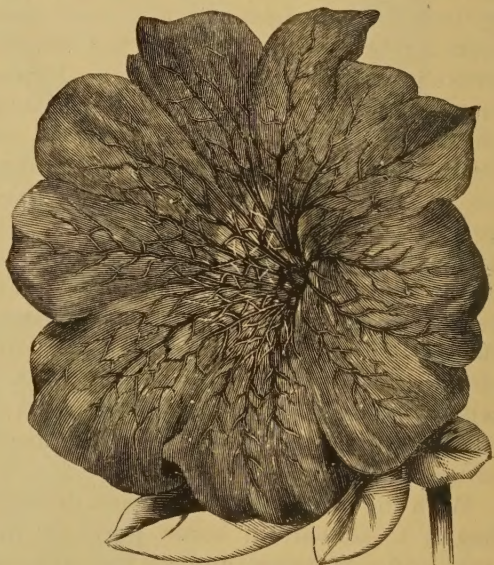
every direction to get a supply of nutriment. The yield of Celery will be moderate. Such plants as Peppers and Egg Plant and Lima Beans, which are supposed to need a warm season to develop them, have suffered equally with the others — they would have reveled in the heat if the supply of moisture had been sufficient. This is a statement of results with good cultivation.

Among the flowers we can report a result somewhat better. The bloom of Gladiolus was short compared with other seasons, as the heat brought the flowers out too rapidly, and they quickly faded; notwithstanding, the bulbs have matured in fine condition, sound and of good size.

It is gratifying to say that many kinds of flowering plants on our ground did remarkably well, giving an abundant and continuous bloom; among them may be particularly noticed Balsams, Ten-Weeks Stocks, Petunias, Marigolds, Verbenas, Sweet Peas, Antirrhinum and Cockscomb. The little *Asperula setosa* was in full bloom all summer, and a mass of it made a fine appearance. The ground was frequently hoed and stirred with the rake; we can especially recommend this rake cultivation, as it is much quicker than hoeing, and in mellow ground the rake will stir nearly the whole of it without danger of going deep enough to injure any roots. When the ground is once mellowed it can be kept fine and open by the frequent use of the rake.

The Petunias made a grand display, being covered constantly with a mass of

Early Peas produced fairly well, coming in before the effects of the dry weather was felt. Early Beans were also good. The earliest planted Potatoes, under good conditions, yielded well. The second early, or medium, maturing Peas gave only about a half crop, while the late ones literally dried up. Onions are small and the usual average of yield is reduced at least one-third. Cucumber and Squash vines gave but a light yield. Late Cabbages generally are small and imperfect, but on light, moist soils they have done well. Carrots and Beets, on light, mellow soil, have given medium crops when they have been well cultivated. The yield of Beets is light and they are rough and rooty — forced to throw out feeders in



GRANDIFLORA SUPERBISSIMA, PRINCE OF WURTEMBERG.

bloom, and the individual flowers were large and perfect. The *Petunia* has been



GRANDIFLORA SUPERBISSIMA ALBA.

Superbissima Inimitable has the wide-tubed or broad-throated feature always seen in this particular strain; the throat is yellow with beautiful radiating stripes of the characteristic netted veins; blade of the flower variegated with purple and white in irregular blotches.

Superbissima intus nigra is nearly black on first opening, but becomes brighter as it gets older; velvety black throat.

Prince of Wurtemberg is a *superbissima* variety, very distinct and beautiful; the veins are large and ramify in every direction; the throat and tube a little lighter, showing the veins conspicuously.

Superbissima alba is a large white flower with darkish veins in the throat; flowers occasionally with a purplish tint.

Of the older or *grandiflora* strain the following are some of the best: *Dark Blood Red*, with *White Throat*, a very fine and showy variety.

Atropurpurea, almost black.

Brilliant Rose is a beautiful shade of color, unusual among *Petunias*.

brought to a high state of perfection in its numerous strains of flowers, which seedsmen have bred in and in until they have distinct and well defined characters. Drawings of a few of the most marked kinds have been made, from which the accompanying illustrations have been prepared, with the view of showing, to some extent, the peculiarities of these so-called varieties, which, however, they are wholly inadequate to do, as only colored figures could even approximately represent them.

A strain of large-flowered varieties, known as *Petunia hybrida grandiflora*, has been bred from to produce another strain of several varieties distinguished by the term, *superbissima*; the florists' name is *Petunia hybrida grandiflora superbissima*. Some of the finest of this latest improved strain are as follows:

Superbissima, a variety distinguished by a broad, open, or fun-shaped, throat, from which issue numerous dark veins, more or less netted, and thus forming meshes. The color is a handsome purple with a white throat.



GRANDIFLORA BLOOD RED, WHITE THROAT.

Grandiflora alba is a very large, clear or paper white flower; the best white *Petunia* in cultivation.



GRANDIFLORA ROBUSTA DOUBLE FRINGED.

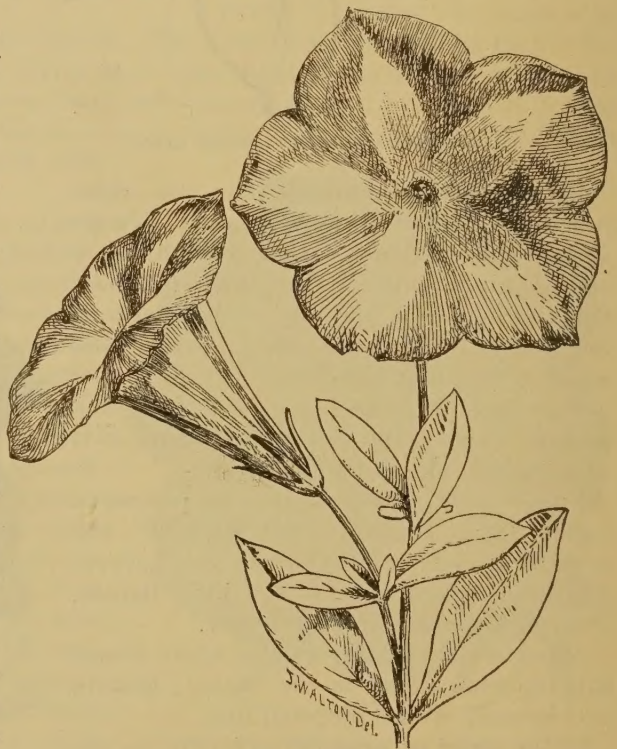
flower, with five radiating purple stripes regularly placed, and running from the tube to the edge of the blade; very distinct and showy.

New Dwarf Inimitable is a lower-growing plant, with smaller leaves, bearing an abundance of small flowers with white stripes running from the center of the flower in star form.

The engravings are made about three-fourths of the full size.

The *Petunia* can be recommended as a most reliable annual, never failing to give an abundance of bloom all summer and late into the fall.

In concluding this review attention is called to the fact that those crops and plants that were put in early and became well rooted and established bore the drought better than late planted ones; that keeping the ground mellow by frequent cultivation was greatly conducive to their welfare, as we had abundant opportunity of noticing by comparison with others not so treated. Similar facts have been noted and recorded so often that they are very generally understood, and yet less attention is given them by many persons than they should receive. The difference between a poor crop and a good one may be considered, as a rule, substantially the difference between success and failure.



NEW DWARF INIMITABLE.

Grandiflora purpurea is purple with a white throat.

Grandiflora venosa is a very large flower, sometimes five inches in diameter, beautifully veined in the same manner as Prince of Wurtemberg.

Grandiflora fimbriata has beautifully fringed flowers in a number of colors; this variety originated on our grounds.

The double-flowered *grandiflora* has large double flowers in various colors.

Double-flowered *grandiflora robusta* has very large, double flowers, beautifully fringed and with various colors and markings; remarkably showy and handsome.

The two following varieties, not of the *grandiflora* strain, are striking and handsome:

Danish Flag is a large, white

TOLD TWICE.

The way house-plants thrive on the dregs of coffee left at breakfast is admiration. Bowker itself hardly turns out stronger leafage or such thick bloom. The grounds are a good mulch on the top of the soil, but a little care must be given not to let them sour and get musty in coolish, damp weather.

The great trouble with house plants, greater than errors in watering, is letting the pots be exposed to the sun. The fibrous roots soon grow to the side of the pot, and these are baked in full sunshine, trebly hot coming through glass, which condenses its rays; the root tips are soon killed. The whole ball of earth is baked over and over, daily, and yet people wonder why they don't succeed with house-plants. Shade the sides of the pots always, either by plunging in a box of sand, moss, cocoa fiber or ashes, or place a thin board on edge across the front of the plant shelf, that will come almost to the top of the pots. Let the plants have the sun, but shade the pots. A good way to screen them is to set each pot in one or two sizes or more larger, filling the space with moss or sand.

The best gardeners say that the porous common pots are not so good for house plants as those glazed or painted outside. The reason is that evaporation is constant from the sides of the porous pots, and the roots are not only drier but colder for it. The only objection to the tin can for plants is its rust inside, which injures the roots. If the can is coated inside by heating and letting melted wax flow over the sides, it will not rust, and with a hole punched in the lower end for drainage, it makes a very serviceable plant holder. It has the advantage of being deeper than most pots, which ought to be fully an inch deeper than common, to allow for drainage. The directions are to put an inch of crocks in the bottom, a thin layer of moss or fiber over this to keep the soil from washing down among the drainage, then a little coarse soil, then a sprinkling of fine to make a bed for the roots, then the plant, filling round the sides with soil sifted through a quarter-inch mesh. I lost many plants before learning that fine soil packs in pots, sifting down and choking drainage, so that the roots sour in the

damp, turn black and decay. Yes. I know the pots from the nursery florist have one bit of crock over the drains, but he raises plants to sell, with as little trouble as may be, and his plants have porous, light soil, with just the right temperature, moisture and shading, and so have less to contend with than plants receive at your inexperienced hands. Give them the deepest salmon cans, or pots, not the largest. Amateurs are noted for having pots too large, but not deep enough. Five-inch pots will grow almost any plant as large as you care to have them in a window, provided they have good drainage, fibrous soil, are watered with stimulating mixtures twice a week, have the leaves sprinkled before the sun is on them daily, and are kept from glaring sun. Sit down close to the window with the sun pouring through, and see how long you can bear it, and ask yourself how the plants stand it with the hot rays blistering their leaves and parching the roots in their close pots. Heliotropes, what with water at the roots and sun in the middle of the day, get black specks on the leaves, and soon give over flowering. The leaves of woody plants, like Jasmines, stand sun better, but even they turn yellow, which is a very bad sign on such strong plants.

The morning sun is gold for plants, and you should let them have it till half-past ten o'clock, when most things had better be shaded till two or three. A thin curtain of Japanese paper let down between the plants and the glass is as good as anything. It breaks the heat rays and tempers the harsh light, giving the softened heat and light in which growing things luxuriate.

Life is too short to spend time picking rose slugs off by hand, and a happy inspiration was to do the plant good and catch the worms at once by dipping a whisk broom in water and brushing the leaves upward from the root, wetting the brush each time. The plant had a refreshing sprinkle, and the brushing on the under side of the leaves swept off all slugs. Hand picking insects is such a drudgery all gardeners will be glad to hear of an alternative. The brushing upward with light, firm hand did not tear or loosen the leaves, and the most search-

ing inspection did not find a worm left afterward. The worms fell on the ground when they were easily destroyed between two bits of shingle. Kill insects quickly and surely. They are nuisances to be rid of, but that is no excuse to torture them. Crush them with a blow so quick they never know hurt. My garden is too dear and sacred in its pleasure to allow even of a worm's suffering in its paths.

Why is not more use made of Dahlias in decorative work? Combined by a fine hand their sumptuous color works into oriental magnificence. As shown at flower-shows, jumbled together, after the old gardeners' rule, two light and two dark, with a dark one always at the corner, it is not wonderful they have won the reputation of being a gaudy, rather vulgar blossom. The collection sent me last spring has converted me to a devotee of Dahlias. The black maroons, the vivid deep scarlets, the snow-white, with a buff tipped with puce that shades richly whatever way you look at it, combine in most striking color-pieces for rooms. Arrange them on salvers or platters, have plenty of dark ones, the blacker the better, with the brightest ones to lead off, and two or three white, creamy or straw ones for high lights, and fringe with tapering sprays of Golden-rod and some seedling grasses. Even the dull Dahlias that look ugly in the garden are invaluable in working up the half tones and harmonies of color. The fluffy False Golden-rod, with its fine sprays, is beautiful with Dahlias, and lightens the effect of a basket charmingly. I forgot to say that the plate must be filled with wet sand or sponge rounded up in the middle to hold Dahlias firmly. Wet moss will do, but sometimes smells badly. If you can cut large branches of perfect flowers in strikingly different shades, with tall tufts of Golden-rod, or rich autumn boughs and wild Clematis, Dahlias are fine for tall vases, otherwise they are only seen to advantage in low arrangements.

When will the sense of color direct home gardening and forbid the tasteless grouping of flowers which discredit each other by discordant hues. My eyes are nearly put out with the flower plots along streets where scarlet Geraniums and salmon pink flourish side by side, with a spotted Coleus and white Candy-tuft to lessen any change of effect. Or

the deep red Hayti Geranium, one of the best standards, is put in a bed with purplish pink Phlox subulata, and a flourish of lilac and white, or variegated Petunias. Nothing is surer to be seen than a rich crimson flower, with a lot of orange and yellow Nasturtiums, finished off with the deepest blue Lobelia, an effect to set one's teeth on edge. If a little round bed of flowers is pleasantly gay, a magenta Petunia is pretty certain to weed itself in, flourish and spoil the whole. Magenta Petunias and orange Nasturtiums in a vermilion tub are a nightmare to garden lovers.

A few words by way of suggestion. You lose half the good of plants by arranging them without taste. They do not show for what they are worth. Your home loses the setting it might have from harmonious bits of coloring in the green sward, and you lose the delight you should have for your labor. In contrast to these eye-provoking failures, last summer, was a veranda box whose principal groups were a Hayti Geranium, its red bloom relieved by a light variegated Coleus, rich in russet gold with pale purple and carmine streakings neighbored by a dark variegated variety, finished by white-edged Ivy. The second was strikingly lovely. Pink and salmon-pink Geraniums against a dark maroon Coleus, feathered off with darkly rich variegated ones and a trailing Kenilworth Ivy. Simpler planting could hardly be, but taste had given an effect more striking than that of costlier plants.

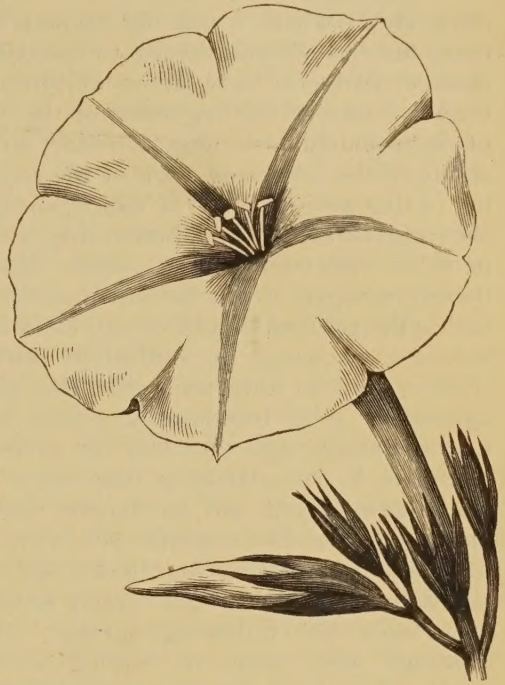
A white Petunia and a purple one grown together offer lovely relief in color, a magenta one looks its best blooming through a bed of silvery Centaurea or Silver-leaf Geraniums. Yellow and orange Nasturtiums grown against the blackest Coleus, or the darkest Nasturtiums, glow richly. Salmon-pink Geraniums and the deepest crimson ones, or dwarf black Dahlias are superb; and a bronze-red Geranium edged with the palest Lobelia or dark Ageratum looks perfection in arrangement. A crimson Hayti for center in a circle of Mrs. Taylor Rose Geranium, edged with Madame Salleri, finishes admirably with a fringe of deep blue Lobelia. But it takes taste to place Lobelias and all high-colored flowers.

SUSAN POWER.

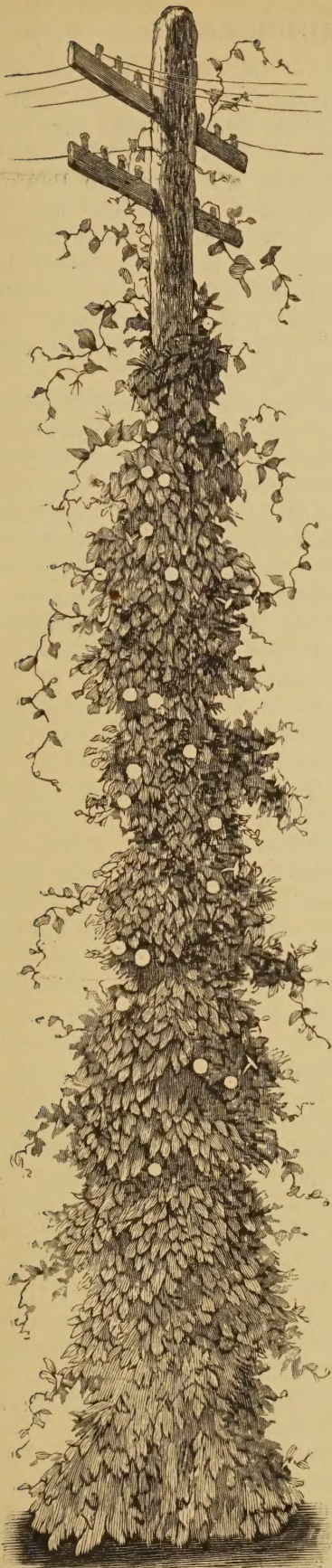
THE MOON FLOWER.

It appears that some persons have been disappointed in the blooming of the Moon Flower when raised from seeds. This is because the seeds were not started early enough. It is a tropical plant and requires a long season to come to maturity. The surest way, for those who have the plant, to keep up a supply is to strike cuttings of it in the fall, and bring the plants along slowly during winter; at the North, during the cold, dull weather, water should be given only sparingly, but in early spring they will make considerable growth, and will be strong and ready to push rapidly when put out at the beginning of summer. Another way is to take up an old plant and shorten the top without cutting it entirely away, and keep it in the greenhouse or window until spring, and in March make cuttings from it. Seeds sowed in the house in February, or not later than the first of March, will also produce blooming plants, if the plants are well cared for. Our engraving shows what plants will do struck from cuttings the last of March. By September they had climbed the telegraph pole, and blossoms were produced freely during August and September. If allowed to trail on the ground the plants will cover a great space, and in this way may be employed to cover an unsightly pile of rocks, where its flowers can be more easily seen and examined than when trained high.

The botanical name of this plant has been variously mentioned, but its true name, as adopted by GRAY and accepted by American botanists, is *Ipomœa Bona-Nox*. This is the name originally given it by LINNÆUS, and, though the plant was subsequently removed from the genus *Ipomœa* by other botanists and renamed, it is now restored. It may be well to say that European seedsmen send out quite another plant, with violet-red flowers, under the same name, consequently seeds received from those sources are unreliable.



MOON FLOWER—TWO-THIRDS NATURAL SIZE.



MOON FLOWER IN SEPTEMBER.

MY PEAR ORCHARD — A REMINISCENCE.

Among the industries that promised much to the energetic and enterprising at the close of the war of the rebellion, that of fruit-growing ranked high. Concord Grapes brought ten to fifteen cents per pound; Strawberries eighteen to twenty-five cents per quart; Bartlett Pears \$3.50 to \$4.00 per bushel; winter Apples sixty cents to one dollar per bushel, and cider, for shipping to Chicago, eight to eleven cents per gallon. Born and raised on a farm which, when I was big enough to carry fire-brands and set fire to decaying stumps, had got forty acres of girdled timber, I was, at the beginning of the era of farm machinery, 1860, familiar with about all the laborious work of the farming of that period, some of which, sheep-shearing, threshing and butchering, I especially detested. Five years later, therefore, when it was settled that cultivating the ground should be my lot, I resolved to exchange agriculture for horticulture, and in this way skip the disagreeable jobs inseparably connected with the mixed agriculture of the period.

It was in corn-husking time when I made up my mind, and not having much but chores to do after this was done, I took a job of cutting four feet wood at one dollar per cord, to get money to buy fruit trees the following spring. My evenings were spent in reading every thing of a horticultural nature that I could get hold of, and this was considerable, as it happened, for I had a friend, a retired miller, engaged in growing Grapes and Pears at Akron, the county seat, who was a finished horticulturist, even to landscape gardening, and was also librarian of a public library just started in that city. His horticultural tastes led him to fill a section of the library with books upon his favorite pursuit, and I think the one hundred and ten volumes he got together upon gardening and farm topics, embraced about all to be obtained in this country at the time. At the suggestion of my friend I took a membership in the library, and in this way read about sixty volumes, including the works of DOWNING, BARRY, THOMAS, ELLIOTT, the romance entitled *Ten Acres Enough*, and many others, a course of reading particularly valuable in the transition stage from agriculture

to horticulture. My friend was an enthusiast in Grapes and Pears, and he advised me to plant these. I also enjoyed the friendship of F. R. ELLIOTT, at that time Secretary of the American Pomological Society, and he advised me to plant Pears. "By all means plant them," he said, "they are somewhat tardy in bearing compared with Apples, and for this reason many will not plant them. A young man can plant nothing that will more surely grow into money."

I looked around me and found growing in several of my neighbors' door-yards healthy, vigorous, bearing Pear trees, forty or more years old; they were the few survivors of many dozen planted, but I did not think of that, so I concluded to plant Pears. I sent for ELLWANGER & BARRY'S catalogue, and studied this and ELLIOTT'S *Fruit Book* until I concluded that I could not get along with less than twenty-eight varieties.

Correspondence with E. & B. assured me of the fact that they could furnish the varieties wanted, so, about April 26th, when I had got one hundred and fifty-four cords of wood chopped, I got on my best clothes, and early the following morning awoke in Rochester. After getting breakfast it was still too early to bother about business, so I started out to see the town. I wandered into the arcade, and it seemed to me a veritable Aladdin's cave—last year it seemed quite common-place, and I have wondered ever since whether the change was in the arcade or in me. I went to see the falls and flouring mills, and then bethought me of an errand. Some of my friends at home, when they knew I was coming to Rochester, gave me little commissions to VICK. They had been his customers almost from the beginning, and were sure that if I only mentioned their names that he would be glad to see me, and would do a little better by me than if they wrote for seeds. I was to visit the garden and bring home some Pansy and Snowdrop and Crocus blossoms, &c.

Well, Mr. VICK had just moved into his new five-story store, and thither I directed my steps. I was received on the first floor by a young man who listened with a far-off look to my somewhat lengthy story, and then told me that Mr.

VICK was at work in the fifth story, and couldn't be bothered. I expostulated, but all to no purpose until a young man, sitting at a desk near by, told him to show me up. As I climbed the stairs—there was no passenger elevators then—it suddenly occurred to me that the tons of seeds scattered in boxes and barrels and bundles must mean a good many customers, and that it was very doubtful whether Mr. VICK would remember the names of my friends, or “set any great store” in the fact that they had sent him numerous little orders. When finally ushered into the genial presence of the man whose name, even then, was a household word throughout the country, I explained my misgivings, and Mr. VICK laughingly replied that my friends were not alone in their belief that they were an important contingent of his customers—that thousands of other ladies in the country thought the same way, and many, on the strength of it, wrote long letters to him, telling not only of their floral troubles but of other matters in which he could have no possible interest. He then laid aside his work and spent half an hour showing me through the establishment, kindly explaining much of the minutiae of the seed business, with which the masses are now tolerably familiar, but then scarcely one in a thousand knew anything about.

After dinner, this was Friday, I went out to Mt. Hope and made arrangements

to pack my trees the following Monday, as I was going up to Geneseo to see some friends over Sunday. Monday morning there was five inches of snow on the ground, and not having any idea that any body would pack trees in such a storm, I did not get around until Wednesday, when I found my trees in three great boxes, awaiting my orders for shipment. I had come three hundred miles to select my trees, and there they were selected and boxed, exactly as the boys trade jack-knives, sight unseen. However, as I had set my time and failed to appear, Mr. BARRY thought I ought not to complain, so I paid for them and looked at them twenty days later, when the freight arrangements of that day, which were much like the “mills of the gods,” brought them to my home.

But this article, which seems to be mostly reminiscence, is already long enough, and I will have to write about the orchard another time. So with two items I will close.

At this time I procured some two year old Asparagus plants for a neighbor. Seventy of them were planted in a single row through a garden, and now, after twenty-one years, are still healthy and vigorous, furnishing a liberal supply for a large family the past season.

I also procured, for myself, some Concord Grape vines, and it was at the root of one of these, ten years later, that the Erie Blackberry sprung up. L. B. PIERCE.

PLUMBAGO—LEADWORT.

These beautiful greenhouse and hardy herbaceous plants are natives of Europe, Asia and Africa. Some of the species make fine specimen plants for the decoration of the greenhouse, and under special treatment will bloom all winter. *P. capensis*, with lavender-blue flowers, *P. rosea*, with rose-colored flowers, and *P. alba*, with white, all bloom profusely in large panicles. They are very valuable in cut-flower work. There is a hardy variety, *P. Larpentæ*, with deep, azure blue flowers, which blooms from early fall till December. All are easily propagated by cuttings of the roots or of the new, soft growth, or by division. The latter secure large, well grown plants without loss of time.

I have two large specimens of *P. Capensis*; they are three or four years old from the cuttings. They have been potted and repotted often, but never attained their present vigor until I used a fertilizer on the soil. This was done last spring, the plants previously cut back very severely and almost all the old wood removed. The fertilizer was used after the new green tips had clothed every stem. Then the wonderful growth from the root began, till, at this date, they are the largest plants of this family I have ever seen, and are filled with buds and bloom.

I had learned that they dislike the full burning sun, and had them plunged where they were not burnt with afternoon sunshine. But they will not endure posi-

tive shade, one extreme being equal to the other. They are too large to be on the benches of the greenhouse, and are plunged to the rim under the west bench. Here they receive plenty of light and some sunshine before noon. I counted the clusters of expanded bloom yesterday, and found one hundred and seventy on both the plants combined. They are quite free from insect pests, and are rapid growers and very ornamental.

Every year until last, I have cut back and repotted the plants in September, thus losing a whole winter's bloom, as

they only bud on the new growth of the summer grown branches, and, as a rule, on the tips of these. They were kept busy all winter in filling their new pots with roots, then when set out in the spring, were all ready to grow fast and bloom.

Repotting in spring, after a severe pruning, has secured me a full season's growth, all ready for blooming in winter, which is quite a lesson to me, and I give it here for the benefit of others who may have these as usually grown, contrary plants. MARIGOLD.

FLOWERS AND TREES IN SOUTHERN CALIFORNIA.

A trip through Southern California, even in the hot and dry months of July and August, is certainly not devoid of interest to one who is a lover of the floral kingdom. If nature alone were relied on to supply flowers at this season of the year, it would be a very poor showing, indeed. An occasional Yucca is still seen growing on the shady side of a mountain, bearing hundreds of beautiful, white, bell-shaped flowers. The proof is visible all around of the abundance of their bloom earlier in the season. Great bare Yucca stems, some twelve to fifteen feet in height and three inches in diameter, are still visible, bearing clusters of seed pods in abundance. They must have presented a grand sight when in full bloom. In some places, as far as the eye can reach, a sight greets you resembling a northern vineyard in winter, caused by the straight stems of the Yucca plants still standing, for some remain erect two and three years before decaying.

Immense clumps of Prickly Pear, with their bright yellow flowers and purplish fruit, have a tendency to enliven the scenery and you, too, if you come in too close contact. Numerous other varieties of Cacti are to be seen, all producing more or less bloom of various hues. Clumps of scarlet Mimulus peep up through the dried grasses, enjoying a monopoly of the surroundings. If you will stroll up some of the clear, sparkling streams that come rippling down the mountain gorge, you will be favored by finding an abundance of Ferns; some species of Adiantum, and various other sorts, are to be seen growing out of the

damp, rocky crevices, and hanging down like graceful plumes, making a beautiful margin for the still pools beneath, where is to be seen the speckled mountain trout in all his glory, enjoying the solitude where he is rarely sought by the festive angler.

At present the mountain sides appear bare and brown, looking quite different from what they will after putting on their winter garbs. As soon as the fall rains set in the grass springs up, as by magic, covering them with a carpet of green, through which flowers of various shades and colors appear in grand profusion.

Leaving nature, in its wildness, we will now go where nature and man have combined their forces. My intention in the start was simply to describe a few of the flowers and trees I saw growing in Los Angeles. As you walk up through the residence portion of the city, you see the streets, on either side, lined with the Pepper tree, which, by the way, is quite beautiful, its long, pendent branches resembling whip lashes, clothed with a light green foliage intermingled with numerous clusters of pale pink berries swinging gracefully in the breeze. The trunks are somewhat crooked and gnarled, but its good qualities over-balance that defect. The Eucalyptus tree is seen very frequently; it lacks both grace and beauty, is noted for its scraggy appearance and rapid growth. It is, no doubt, valuable as a fuel producer in a treeless country. It seems to thrive even on the driest land. On either hand beautiful and well kept lawns greet you, as

fine as any I ever saw, east or north; of course, they are kept up by constant sprinkling. Beautiful specimens of Palms are to be seen in almost every yard, and tropical looking Bananas loom up with their massive leaves. The Monterey Cypress is grown and trimmed in fanciful shapes, and is also extensively grown for hedges; it makes one of the finest fences I ever saw, being very dense and bearing trimming well. The Araucaria is an aristocrat among trees. Some noble specimens of it are to be seen towering up in stately form by the side of other trees of more humble appearance. The Aralia and the Ficus elastica are to be seen in the shape of trees a foot in diameter, the former with nicely cut foliage, and the latter with its great shining, leathery leaves, making a beautiful appearance. Roses were to be seen almost everywhere in countless numbers. I think in California they come nearer the size they are usually illustrated in florists' catalogues

than in any other place I know of. Plumbago is to be seen trained up the side or corner of a house, running rampant, thirty to forty feet; its pale blue flowers hang in vast numbers, contrasting nicely with the white flowers of the Jasmine that is frequently growing by its side. The showy Hibiscus, with its large, brilliant blooms, enlivens the scene. Fuchsias, too, lend their color to make things beautiful; single plants, ten to fourteen feet in height, with hundreds of flowers, are frequently seen. Geraniums run riot with one another, and, in fact, it seems as though everything in the plant line was trying to out-do the other. Crape Myrtle looked like great sheets of pink, so dense was its bloom. What seemed strange was to see the Magnolia tree in full bloom in August; its great white flowers peeping out through the glossy green leaves of the tree made a beautiful sight.

WALTER L. GUMM, *Remington, Ind.*

SOME NEW BEGONIAS.

Since the publication of my article in the September number of this MAGAZINE, page 263, in which I mentioned a new Begonia, whose name I gave as "Giant," I have received several letters from florists asking where it could be procured. My plant was bought from the florist who has charge of the greenhouses at Riverside Cemetery, Appleton, Wisconsin, Mr. DENNIS MEIDAM, and in a recent communication he tells me that he procured the original plant, which is the one I have, from a florist in Indiana. The specific name of the variety is *Begonia semperflorens gigantea carminea*, he writes me. At the time I bought it they had simplified it to Giant, which is a very appropriate name.

Since the writing of the article referred to, my plant has grown rapidly, and is now a good sized one, with leaves much larger than my hand with its fingers outspread. They are much like those of *B. Washingtoniana*; in color they are a rich, clear green, with slightly lighter colored veins, and a spot of red at the junction of leaf-stalk and leaf. They are smooth on both sides, like the foliage of *B. rubra*. During the latter part of summer the plant took a rest, in one way—it did not

blossom—but it kept on growing. Now it is full of buds, and one cluster of flowers has expanded. They are borne on a stiff, upright stalk about eight inches in length, well above the foliage. The individual flowers are larger than those of *B. rubra*, and in color much superior to that justly popular variety. Those of *B. rubra* are a sort of coral-red, while those of this new variety are a brilliant carmine-crimson, lighter by a shade or two on the inside of the petals, and looking, in the sunshine, as if gold-dust had been sifted over them. The habit of the plant is strong and erect, and its massive foliage, with its many clusters of flowers showing above it, makes it by all odds the most desirable variety of Begonia that I have seen for a long time. I have heretofore considered *B. rubra* the best of the scarlet-flowering section, but I consider the Giant an improvement on it. It seems to be a very easily grown sort, as I have given it only the most ordinary treatment, and I have never had a plant grow better. I have it potted in a soil made up of turfy matter, well rotted manure from the cow-yard, a little loam, and enough sharp sand to make the mass light and porous under all conditions.

The pot in which it is growing has an inch or two of broken brick in the bottom to make sure of good drainage. I water it precisely as I do my Geraniums, when the surface of the soil looks dry. It gets a weekly watering of liquid manure, quite weak, but sufficiently stimulating for all plants potted in a tolerably good soil. This manure water is made by leaching soil from the cow-yard. I have never found any other fertilizer quite equal to this, and where it can be obtained I would always recommend its use in preference to any of the manufactured fertilizers.

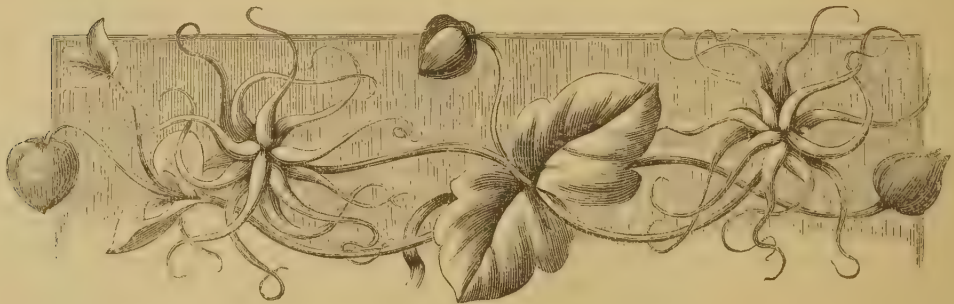
Another very fine Begonia of the ornamental-leaved section, is *Olbia*. It has a leaf of about the size of the foliage on a good specimen of *B. metallica*, of a rich, shining olive-green on the upper side, marked slightly with white spots at times, but this marking does not seem to be even all over the plant. Some leaves are entirely without spots of any color. The under side of the leaf is a bright reddish-bronze. The texture of the leaf is much more delicate than that of *B. metallica*, and the color is much richer. It is not an easy matter to describe its appearance, but when I say that it looks like velvet, with a luster like that of satin, I have come as near a description of it as I am able to. It seems to be a hybrid variety, with characteristics of the flowering and Rex sections, and is adapted, I should say, to cultivation in ordinary windows, though I have not tried to grow it outside of the greenhouse. It is of erect habit of growth, and branches freely. It is a magnificent plant, and

really more desirable than any Rex variety I have, and my collection includes some of the finest sorts, because it has a better habit, and is a free grower. I have not seen this variety named in any catalogue as yet. I do not know whether it was a new sort, like the Giant, or not. It was procured from the same party, and possibly he got it from the same florist who sent out the other. [Is it *B. alba picta*?—ED.]

From a florist at the east I received a plant of *B. Pearcei*, last spring. This is one of the tuberous varieties. It has foliage quite as pretty as that of some of the varieties grown for their leaves alone. They are of a rich green, with veinings and broad markings of a darker shade, something in effect like the variegation of *Maranta zebrina*. The foliage is plentifully produced, and soon covers the top of the pot. Flowering begins in June and lasts till October. The flowers are a soft shade of yellow, single, borne with great profusion, and contrasting finely with the elegant foliage.

It would seem that there is a "new departure" in Begonia growing. We are each year getting new varieties in which some of the features of the Rex sorts are being combined with the characteristics of the flowering section—varieties with fine foliage and fine flowers. The Rex varieties have never been satisfactory in ordinary room culture, but these new sorts seem to grow quite as well in the sitting-room and bay-window as Begonia *rubra* or *B. Weltoniensis*, which is, after all, one of the finest of all Begonias when well grown.

EBEN E. REXFORD.



FOREIGN NOTES.

THE NAME OF A ROSE.

In a late number of the *Journal des Roses* a communication appears from Ketten *Frères*, in regard to the different ways in which the name of a Rose is written, who decide with good reason, as is shown, that it should be Félicité-Perpétue. Our best American authority gives it as Félicité Perpétuelle which appears to be neither English nor French.

Now, all becomes clear if we write Félicité-Perpétue or Félicité et Perpétue, two women's names. As a matter of fact, Perpétue and Félicité are two celebrated women of Christian antiquity, filling a glorious page in ecclesiastical history; two saints almost inseparable, who together suffered martyrdom for the faith at the beginning of the third century of the Christian era. They were bound up in the closest friendship; they were arrested and imprisoned at the same time, and subsequently (203 A. D.) were thrown to wild beasts in the amphitheatre at Carthage, and together received the palm of martyrdom. This is why the Roman Catholic Church also never separates them, but annually does honor to their memory on the same day, and everywhere, as in the list of martyrs, in the breviary, &c., the two names are found united. For these reasons and in consideration of the views above expressed, we think we may formulate our deliberate opinion in maintaining that it is highly probable, not to say certain, that the original name of the rose in question, dating from 1827, was Félicité-Perpétue; Perpétue with a capital P and joined to Félicité by a hyphen, or else Félicité et Perpétue. Then this Rose's name is intelligible enough. The pious intention of its raiser, M. Jaques, gardener to Louis Phillippe, who was subsequently King of France, undoubtedly was to dedicate his Rose to these two celebrated saints, so closely united in life and death. And the Rose itself, if we consider its qualities—the evergreen bush with white flesh-tinted flowers—was perfectly suited to this dedication; the white typifying the innocence of these two Christian hero-

ines; the flesh-tint their martyrdom; and the evergreen tree, their immortality.

TRANSPLANTING LILIES.

Concerning the transplanting of Lilies no better advice can be given than that of your correspondent, viz., "leave them alone unless compelled to lift them," for however careful one may be it takes years for some kinds to recover their former vigor, when an established clump has been disturbed. Some species are far more affected by removal than others, a few of the principal being the Madonna Lily (*L. candidum*), *L. Pomponium*, *L. pyrenaicum*, *L. pardalinum*, *L. Humboldti*, and *L. Szovitizianum*. Of this last I obtained about six years ago some imported bulbs, and planted them in good, well-drained, loamy soil, surrounding the bulbs at the time of planting with sand. They were planted at such a depth that when finished the top of the bulb was six inches below the surface of the soil. The first year after planting the only display made by these Lilies was a puny attempt on the part of one or two bulbs to bloom, but the flower-stem died away when but a few inches above the surface. The following year there was a fair show of bloom, but the third season yielded far better results. Unfortunately, owing to some alterations that were being carried out, it became necessary to remove the bulbs, which was done as soon as the flower-stems decayed, but notwithstanding the fact that it was carried out very carefully, and the bulbs were above ground but a short time, the following season they did no better than the first year after importation, while they improved again the second, and this year they reached about the same state as before removal. *L. pomponium* behaves in much the same manner, except that it yields a better display the second season than *L. Szovitizianum*. The North American kinds, notably those with rhizome-like bulbs, are very impatient of removal, and to these must be added Humboldt's Lily (*L. Humboldti*), while *L. Washingtonianum* I can never bloom in a satisfac-

tory manner. The best time for transplanting Lilies is, in my opinion, just as the flower-stems decay, for at that period there are in most cases a few stout roots just discernable above the base of the bulb. As these roots grow away at once it is evident that when the removal is delayed later they are injured and the bulbs must suffer thereby. Though in the case of some Lilies a bulb will flower the first season even if these roots at the base are not well developed, it is generally weakened thereby, in proof of which I may mention that having occasion to pot a quantity of *L. auratum* late in the season, I found on turning them out of their pots after flowering that there was a great difference in the condition of the bulbs, some being, despite their late potting, pretty good, while others had almost disappeared. Further investigations revealed the fact that the soundest bulbs had all pushed forth a considerable quantity of roots at the base, while in the case of the others these roots were imperfectly developed. The flower stems would thus appear to be supported at the expense of the bulb, while the latter from the insufficiency of roots would suffer thereby. The roots around the bottom of the stem are often present in greater numbers when the bulb is decayed than when it is perfectly sound. Though many Lilies are so impatient of removal, there are, on the other hand, some that are but little affected thereby, the most prominent among which are *L. Tigrinum*, *davuricum*, *speciosum*, *longiflorum*, *elegans* or *Thunbergianum*, and *auratum*. Given conditions favorable to flowering, they may be relied on to bloom the first season, and on that account are often grown for flowering in pots, in which they do well.

H. P. in *The Garden*.

FLOWER GARDENING.

The bedding-out system has been inadequately represented in many gardens, but worse than that it has been caricatured by both employers and their gardeners through a very common lack of appreciation of the effects of color and arrangements. I do not intend to say a word against bright colors. They are indispensable. The fault is in the use made of them. No color is more often rendered unpleasant than yellow, and yet no color, when rightly employed, is more

effective or more pleasing, especially in autumn. It does not matter much whether the effect is produced by a mass of *Calceolarias*, single Dahlias, or *Précocité Chrysanthemums*, or single Marigolds, common Cornflowers, Violas, or Pansies, the effect is much the same in all, though I prefer variety of form when it can be had, so grow them all, and many more yellow flowers besides. It is only when trying to associate any of these with flowers of another hue—crimson *Pelargoniums*, scarlet *Tritomas*, blue *Lobelias*, or Violas, and these again with others—that so often the fatal mistake is made and condemnation follows. But putting that aside as a fault which is apparent in every branch of gardening where color is a feature, it is perfectly certain that no plants have yet been found that are capable of superseding the ordinary bedding plants. True, we do not now require to confine the plants we grow to a few; such recent additions as Tuberous Begonias and single Dahlias, and those of a later date, such as Violas and *Tropæolums*, are of themselves features which have done much to change the appearance of ordinary bedding. Still, the fact remains that some of the older sorts cannot be dispensed with. *Calceolarias* are still bright. *Pelargoniums* as represented by the newer varieties are much brighter than of old, *Lobelias* are better, so are *Ageratums*. Those who are fond of leaf effects have a very wide selection. Of hardy annuals themselves we have quite a good number; *Phlox Drummondii* is a host in itself, *Tropæolums* in beautiful variety, Snapdragons, Marigolds, and older kinds like *Saponarias*, the crimson Flax, &c., are useful.

What about hardy herbaceous plants? Is it necessary or desirable even to revert to the condition of gardens before the bedding-out system, with all that was bad about it, opened the eyes of the whole community to the beauty of flowers? Shall we not rather do as we are, and have been doing for years, change what is bad and repugnant to refined and educated taste in the bedding-out system, and at the same time add all we can of the beautiful, whether they be tender or hardy, to the number of our out-door decorative plants? That is the system I am pursuing, and it is the system which must prevail in the future. We are a

changeable people, but we are also utilitarians, and from among the crowd of new and old plants which have found their way into gardens during the past dozen years those which are best fitted to adorn our beds, borders, lawns, and desert places will alone remain, and the many which are of doubtful effect pass out of sight. If I may be permitted I would strongly advise gardeners to get out of all ruts, and to strike out for themselves decorative features suitable to their particular cases. The treatment of hardy plants from a decorative point of view is in very many cases quite as bad as ordinary bedding ever could be. Passing through gardens we hear the oft-repeated never-ending phrase about their being always something fresh "coming out" among herbaceous plants, and too often that it is their only redeeming point. The overwhelming majority of garden possessors do not so much want "something interesting to look at" as bold effects and plenty of flowers, and whether these are tender, half-hardy, or hardy, softwooded, annual, or perennial will not trouble them. Nothing I am acquainted with can compete in richness of effect with Henry Jacoby Pelargonium, and no other flowers of the same color last for so long a period. Yellow Calceolarias hold exactly the same position among yellow flowers, and we might note others; but although this is the case we find room for growing large quantities of Tritomas, of Précocité Chrysanthemums, of Sedum spectabile, of all sections of Dahlias, of all sections of Michaelmas Daisies, of Daftodils, Primroses, Polyanthuses, Paris Daisies, Carnations, Pentstemons, Phloxes, Asters, Pansies, Lilies, of many annuals, &c.; and I am fully persuaded that the gardens and grounds would suffer were we to do away with any particular section of plants.

B. in *Journal of Horticulture*

HYBRID OF ROSE RUGOSA.

A seedling Rose from *Rosa rugosa* crossed by a White Tea, Madame de Sombreuil, is one of the latest announcements from France. This result is due to M. Bruant, a horticulturist of Poitiers.

The hybrid is described as vigorous, very free blooming, and very early; it forces admirably and easily, white, lightly tinted with yellow, in corymbs like *R. rugosa*, and has a slight Magnolia odor.

ANNUALS AS BEDDING PLANTS.

One of the prettiest gardens that I have seen for a long time was filled with annuals of various kinds. There was not a single plant of any of the so-called "bedders" in it. There were Balsams, Asters of various kinds, fragrant Ten-week Stocks, dwarf and various Tropæolums, Everlastings, with their many curious tints, Grasses, and other things too numerous to mention. Roses here and there, with a few good hardy perennials, completed the display, which was very instructive, as it illustrated admirably the value of half-hardy annuals, and proved that a gay garden in summer is a possibility without the aid of those plants that are costly and troublesome to keep through the winter. The fact seems to be that the capabilities of annuals are known to but very few flower lovers. The primary outlay is small, the culture is simple, and the results are out of proportion to the expense incurred. With the exception of the zonal Pelargonium, annuals equal bedding plants in brilliancy, whilst they exhibit greater delicacy of tint. The soft shades of color of Ten-week Stocks are particularly pleasing; and in Drummond's Phlox we get great brilliancy as well as refinement of tint. This last mentioned annual is for effect undoubtedly at the head of the others. It runs the zonal Pelargonium hard for premier honors as a summer decorative plant; indeed, it is only the very brightest tints of this bedding plant that can surpass the most pronounced tints of Phlox. Drummond's Phlox is a host in itself, and every bit of good culture bestowed upon it has its reward. The true nature of it is too often suppressed by a meagre diet. It wants plenty of good rotten manure, worked in the ground at planting time. Put this down to the depth of a foot, and you will have no reason to discard this annual for its fugacious character. If there is a summer-blooming plant that needs generous treatment, it is this one. If it does, in a dry time, show signs of exhaustion, give a top-dressing of some stimulant, and wash it well in, and you will get a good display of bloom up to the advent of frost. Give annuals the same good culture as bedding plants; give them a place of honor instead of using them as stopgaps, and you will have no cause to complain of their want of effectiveness.

It should, moreover, always be borne in mind that the same good treatment that gives perfect flowers ensures their remaining in beauty for a considerable time.

J. CORNHILL in *The Garden*.

TALL-STEMED IVY GERANIUMS.

The following account of raising Ivy-leaved Geraniums with high stems is substantially as narrated by a Lyons horticulturist Crozy aîné, in the *Revue Horticole*.

It is well known that the strong growth and abundant blooming of the Ivy-leaved Pelargoniums (*P. peltatum*) produce a fine effect when the plants are trained on trellises or frames of wood, or iron, and allowed to hang gracefully in different ways. But the difficulty is to raise the plants on stems sufficiently strong, for this requires several years. A means of obtaining this result quicker and better than is ordinarily done is here offered. Last year, in autumn, I tried for the first time to graft Pelargonium peltatum upon plants of Zonal Pelargonium, which had been raised with tall stems, and met with the greatest success. I do not know that this process is known; it has always succeeded perfectly with me. I have been particularly well satisfied with varieties having fine wood, the stems of which branch numerously, as they are arranged and fixed in place with much greater ease than when trained upwards on wire frames.

Good results are obtained by using frames in form of a ball or parasol fixed at the height of the graft by a good support.

This year 1887, during summer, nothing has been more attractive than the plants which were grafted the preceding year, and which spread out regularly their

multitude of flowers. The grafting was done in an ordinary greenhouse, and without particular precautions; the grafts took perfectly and uniformly.

The best stocks for this purpose are young plants of Pelargonium raised from seeds sown early and kept in the greenhouse in order to get sufficient height. A single stem can be grown up which will easily reach the height of two or two and a half feet, and can be cut where it is desired to place the graft.

PERISTERIA ELATA.

Is it generally known that this Orchid may be increased by separating the old pseudobulbs after they have flowered and become apparently useless? I have a plant in flower at the present time from which I took two pseudobulbs that had made no growth for seven or eight years, but soon after they were divided and potted they made beautiful leaves, are now doing well, and I expect to flower them next season. I shall be pleased to show any one skeptical of the fact the plants treated in this way.

O. ORPET, in *Gardeners' Chronicle*.

ROSE, ETOILE DE LYON.

French rosarians have discovered that this variety blooms far more satisfactorily when budded on Rosa polyantha. Young plants on Polyantha stocks, forced slowly in a cool house, will give a great quantity of flowers of remarkable beauty. Such plants in six-inch pots have produced from twenty to thirty flowers in a season.

ORNAMENTAL AND USEFUL.

In Alsace the fruits or seed-pods of Rosa rugosa are made into preserves.



PLEASANT GOSSIP.

PITS FOR PLANTS.

Will you, or any one, please inform me in the *MAGAZINE*, how the pits are made which they use for potted flowers during winter? I have read that plants can be kept from freezing and in bloom all winter in them. Are they boarded, walled or bricked at the sides and bottom? Is a drain needed? What is the best size, and the best position for them? I suppose they are covered with glass. If any of your readers or customers have used them, I am anxious to learn from them how they have succeeded.

M. C. L., *Newark, Delaware.*

In climates where severe weather is not too long continued plant pits are quite serviceable to keep plants over winter; south of the latitude of New York they can be depended upon if properly cared for. The following extract from *VICK'S FLOWER AND VEGETABLE GARDEN* gives the information asked for in regard to them:

What is known to gardeners as the cold pit is only an out-door cellar, expressly made for the preservation of plants. In such pits many of the more hardy greenhouse plants may be successfully wintered. The following list, including, perhaps, those plants which amateurs would be most likely to possess, may be wintered perfectly in a cold pit: Abutilon, Bouvardia, Camellia, Carnation, Cestrum, Crape Myrtle, Erica, Fuchsia, Geraniums, Hydrangea, Lantana, Laurestinus, Laurus, Oleander, Pittosporum, Pomegranate, Roses of all kinds, Tritoma uvaria, Yucca, and many others of like nature. Soft-wooded plants, like Verbenas and Heliotropes, are apt to mildew.

A pit for the purpose described should be situated in as sheltered a position as possible, and have thorough drainage. It may be not more than four feet deep, and be reached from the top or outside when the sash is removed; or it may be from six to eight feet in depth with several shelves, and of a size to suit the number of plants to be kept. If built on the side of the house it may adjoin the cellar, and have an entrance into it through the cellar wall; but as dampness is the great enemy of such a place, this trouble may be obviated by building a double or hollow brick wall. When it is not conven-

ient to build a stone or brick wall, or where lumber is cheap or easily to be obtained, the walls may be built by taking pieces of two-by-four studding and nailing to them on each side rough boards, so as to form a double wall of boards with an air chamber. These may then be slipped into their places at the sides and ends of the pit and fastened together. The front wall should not rise over six inches above the surface of the ground, and the rear wall only enough higher to give the sash sufficient slope to carry off the water easily. The back side can be banked up with earth within a few inches of the upper edge. A pit of small size may be made not more than six feet in width, and six, nine or twelve feet in length, and it may then be covered with common hot-bed sash, which are usually made about three feet by six feet. Of course, it can be made as large as desired, even so large as to require a span roof, which may be made stationary or with moveable sash, at one's option. In stormy weather it is necessary to furnish better protection than that afforded by the glass, and this is secured by heavy straw matting, and it is well to have narrow board shutters that can be handled easily, to cover the glass, and over these the matting is placed. The two will secure exemption from frost in the worst possible weather.

BEGONIA—GLOXINIA—PANSY.

I have a Begonia Rex that is two years old, which I started from a leaf. It is a thrifty plant, and I notice that it has budded. I was surprised to find buds, as I thought that ornamental-leaved Begonias never blossomed. Will it injure the plant to allow it to blossom?

What treatment do you give Gloxinias after blooming, and what soil do they require?

The Trimardeau Pansies that I purchased of you last spring, were perfectly elegant. They were very large and of great variety of colors. I think they are the handsomest Pansies that I ever saw.

E. M. K. *Liverpool, N. Y.*

It will do the plant of Begonia Rex no harm to bloom.

The best answer we can give in regard to Gloxinias will be found in the follow-

ing extract from a prize essay on the Gloxinia, by Mrs. H. R. LUNEY, published in the MAGAZINE in May of last year: "Allow your young plants to grow until the tops show signs of ripening off, or till late in the autumn, if they seem inclined to do so, then gradually withhold water and put them, after the foliage is well dried off, beneath the staging, if in the greenhouse, or, if under house culture, in some warm and comparatively dry place where there is no danger of frost through the winter. I have a box which, covered with cretonne, presents quite a respectable appearance in the sitting-room, and at the same time serves as a receptacle for my dormant plants until such time as their starting shoots or my own convenience decides me to place them in the window again. One method of preserving the roots during their period of rest is that of packing them in sand, but I feel more certain of success if I allow them to remain undisturbed in the pots in which they were grown, for experience warns me to be careful how I meddle with the dormant bulbs, although the growing plants can be repotted at any time, and even subjected to very rough treatment without much injury."

Our own practice is to pack the bulbs in leaf-mold, and keep them in a temperature near 45°.

MICE IN ORCHARDS.

Mr. S. R. LELAND's paper on "Mice in Orchards," published in your MAGAZINE of November, 1887, page 343, is calculated to make an average Ohio fruit-grower laugh. The idea of feeding oats to mice to keep them from eating the bark of young trees, is so ridiculous that I could scarcely believe my sense of sight when reading the otherwise good article.

I, too, have mice on my farm, and plenty of them. I also have fruit trees by the thousand; from three to thirty years old, and know from experience that mice will eat the bark of young trees only when grass is allowed to grow around them, affording convenient places for them to build their nests next the trees, and when hungry in winter will eat the bark all around, and cause many to die.

I will give you an infallible preventive which will cost nothing but a little work. Late in the season, before the ground is frozen, cut out all grass near the trunks

of your trees, with a sharp hoe, then shovel up to them clean soil, hilling up somewhat, and to extend a foot or more around the trees, and pack with shovel or trample with feet, solid. Mice will then find no harbor next the trees, nor will they injure them in any way. Try this sure remedy, and feed your oats to your horses. N. OHMER, *Dayton, Ohio.*

SWEET WILLIAMS.

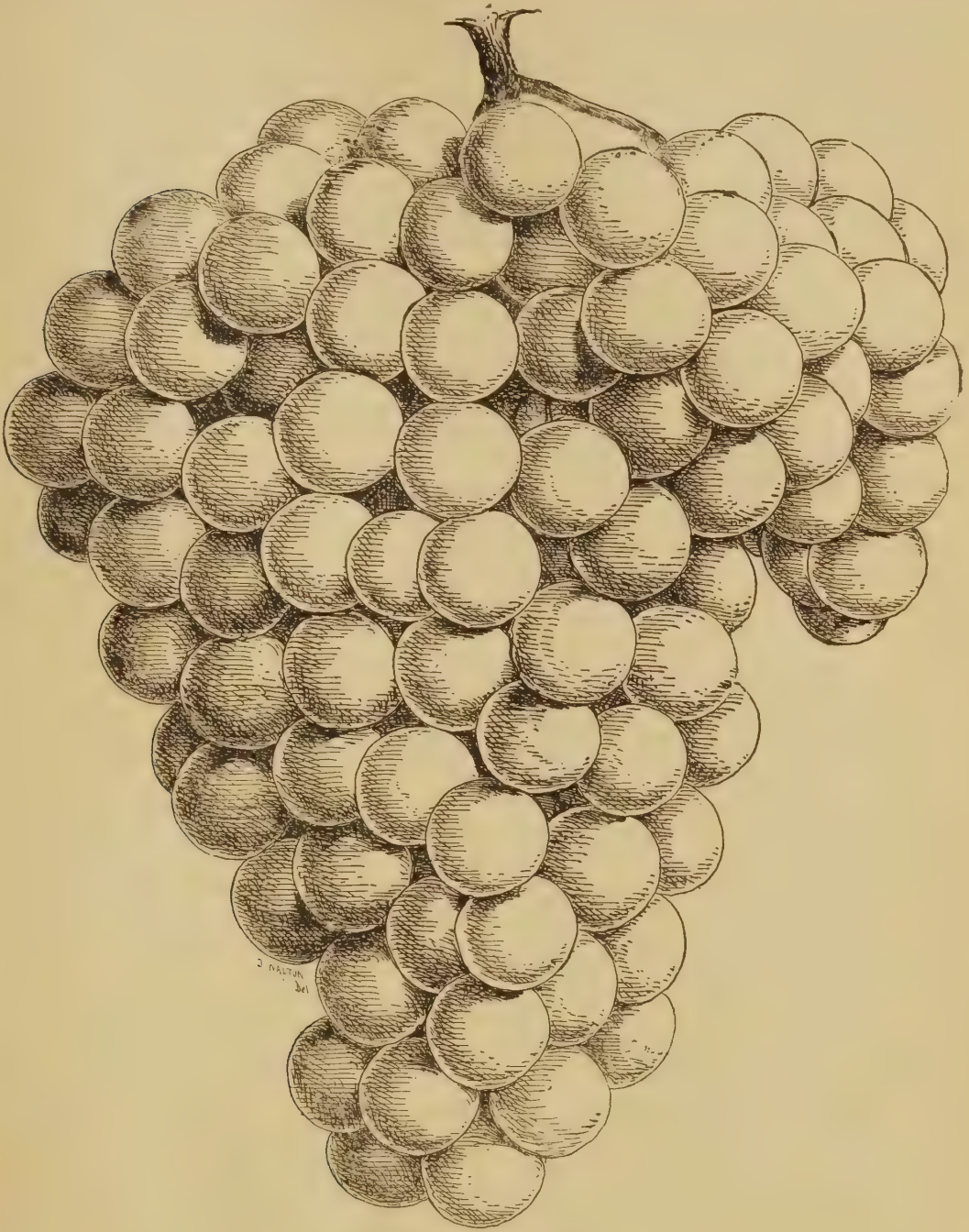
The Sweet William is one of the finest flowering plants among the hardy perennials. It has been carefully bred by florists for a long time, until it now shows large, bold flowers in great trusses even six and seven inches across. The colors have a wide range both in single and double varieties, the latter being large and full. Our colored plate shows two single varieties, white margined with colored centers and white eyes, which are only samples of a great variety of markings. The double-flowered varieties are also of many colors. The Sweet William is a perennial of short duration, three years being about the length of time it can be depended on for good flowers, and consequently, to keep up a supply, a sowing of seed should be made at least every other year. The seeds can be sown in the fall or early in spring, transplanting the young plants to their permanent quarters when sufficiently strong.

WEeping MULBERRY.

A variety of Weeping Mulberry, a chance seedling, came up on the grounds of J. J. MEASER, of Kansas, which has proved to be valuable as an ornamental weeping tree. An account of it has been sent to the *Prairie Farmer*, from which we gather that this Weeping Russian is similar to the other Russian Mulberries, making a wonderful growth on rich, moist soil, and a fair growth on any soil where any other tree can find moisture to exist on. The fruit is agreeable and very profuse in early summer; in color, black; in size rather smaller than the domestic varieties. The form of the tree seems to be perfect—every limb bending in graceful curves toward the ground. The stock is perfectly hardy, bearing without injury the heat of summer and the severest cold of winter. The leaves are of handsome form.

THE DIAMOND GRAPE.

Our opinion of this Grape has already been made known in these pages, but, briefly, we may say that it has proved itself to be a very superior variety, being excellent in quality, and combining those desirable traits that make a Grape valu-



THE DIAMOND GRAPE.

able and worthy of extended cultivation. Among white varieties, in our knowledge, it has no equal. It is hardy, healthy, handsome and very productive, and ripens early. The engraving here presented shows the general form of a cluster of the fruit, though both bunch and berries are considerably reduced in size to admit of showing it on this page. Having known and watched this variety for the past four years, we are confident that as soon as the public is acquainted with it, it will occupy, by general consent, a position with those in the highest rank.

FLORAL GOSSIP.

One of the most satisfactory plants for spring blooming is *Streptosolen Jamesonii*. It blossoms with great profusion well along into the summer, and its bright yellow flowers are very attractive, as they cluster among the somewhat slender and drooping branches. I supposed, from the description of the plant, that it was an upright grower, but with me it is quite the contrary. The branches do not have strength enough to hold themselves erect. This should not be considered a fault, at all, as I think the plant is more attractive in its drooping habit than it would be if it were otherwise. It is fine for use on brackets. Its rich orange flowers, changing to cinnabar red, contrast well with scarlet and white flowers, and give a sunshiny tone to a collection in which those colors preponderate. It grows easily from cuttings, and comes up freely from seed, which it scatters in pots. I shall try some of these seedlings in the garden next season. I see no reason why it should not prove to be a desirable bedder along with *Verbenas* and other low-growing plants.

I do not know that it is at all uncommon for *Camellias* to bloom in spring and again in fall, but I have never seen them in blossom after June until this year. Last spring, one of my plants gave a fine crop of flowers. During the summer buds set for next year, as I supposed, but one day I noticed that some seemed to be getting ready to unfold. The plant has now three fine flowers on it. None of the other buds appear to have any notion of becoming flowers at present. Only one plant has given flowers a second time in the season, and all have been treated precisely alike during the summer. The variety that has given the second crop of flowers is *C. imbricata*. Is this a common freak?

One of the most interesting plants added to my collection the past season was an *Anthericum*. This is, perhaps, better known under the name of *Flamingo* plant. The flower consists of a spathe, long and narrow, a rich scarlet in color. The spadix, which is also slender, is a sort of reddish-brown in color, and takes on a peculiar curve after the first few days. The spathe is reflexed in such a manner as to suggest the body of

a *Flamingo*, while the twisted spadix represents his neck and head. The flower, or rather the spathe, which, strictly speaking, is not a flower at all, but passes for one, as in the case of the *Calla*, lasts for weeks, retaining its brightness. The leaves are thick and leathery in texture, of a dark green, contrasting well with the flowers. It is grown in a mixture of sphagnum and broken brick with a little peat. It requires a great deal of moisture. My plant bore five flowers during the season. It has been resting for some weeks, but I notice that new leaves are starting now.

If grown singly, the new Cape bulb, *Hyacinthus candicans*, is disappointing. It lacks "body," to use an artist's term. There does not seem to be enough of it. But planted in groups, ten to a dozen bulbs in a cluster, it affords excellent satisfaction, especially when used among *Gladiolus*. The flower-stalks stand up well above the *Gladioluses*, and their long spikes of pendant white flowers produce a very pleasing and striking effect. The catalogues say that it is "delightfully fragrant." I fail to find that it has any fragrance. I notice, too, that it is catalogued as hardy. I do not believe this to be the fact, for bulbs left in the ground last winter, in well drained, sandy soil, covered to the depth of a foot with leaves, were rotten this spring. I think it can only be wintered by taking up and keeping as one keeps a *Tuberose*. For planting in groups among shrubbery, or in exposed positions on the lawn, where a stately plant is wanted, this will be found very effective.

Speaking of *Tuberoses* reminds me that I tried a new plan with mine the past season. I have heretofore found that bulbs planted with the old roots left on started very slowly. Some one told me that if I would cut off the bottom of the bulb with these old roots on, I would find that plants would start very easily and quickly. I did not "take much stock" in the advice, but thought I would try it, and about a dozen were treated in that way. They started into growth right away, and came into flower at least a month sooner than those planted just as received from the florist. From which I conclude that it is possible to hasten the development of these plants by cutting off the bottom of the bulb at plant-

ing time, At any rate, my experience has justified me in making such a conclusion. Bulbs planted with the roots on are not yet out of flower, while those treated in the manner described above were out of bloom weeks ago. For late flowers, then, I would not cut off the old roots. Has any one had any experience of this kind with this flower? If so, I would be glad to hear from them about it.

I had some trouble last year with frost from the glass in the roof of my greenhouse. Some of the plants were so tall that they touched the glass, and it was impossible to prevent the frost from accumulating there at night, and each leaf that touched the glass was sure to be frost-bitten. I have, this fall, procured and stretched wire netting along the rafters, from end to end. This netting is a yard wide, and reaches up so far from the sides that all of the plants on the highest benches are prevented from touching the glass, as the netting keeps them away from it by the depth of the rafter. It is made of such fine wire that the light is not at all obstructed. I shall make it useful in another way: Small and slender-growing vines will be trained along its edge and allowed to run in such places as it may be desirable to have some shade for the plants standing below.

Of all hanging plants I think the most desirable is *Othonna*. I think this because it grows so thriftily with the most ordinary care, and blooms so profusely. Its bright yellow flowers, quite like miniature *Dandelions*, give a very cheerful look to the pretty vines as they trail over the basket, and on every sunny day there will be scores if not hundreds of them. R.

VINES IN THE ROOM.

Few running plants are prettier for house decoration than those commonly known under the general name of Ivy. The German Ivy, *Senecio scandens*, is a rapid grower, but will not bear the cold as well as the English Ivy, which is the only real Ivy of the plants I am now noticing.

The English Ivy, if well treated, will live for many years. A friend of mine has one about fifteen years old, the largest one I ever saw. She keeps it on the piazza in summer; in the fall it is removed to the cellar. The Ivy is wound around two tall stakes which are thrust

into the soil in the keg which contains the plant. Water is given occasionally during the winter. If one has an English Ivy which seems to be dying, and its leaves wither and fade, they must not be picked off, but must be left to drop off. If the leaves are picked off when they show signs of decay, the tiny leaf-bud at the stem, so small as to be unnoticed, will be liable to be killed; but if let alone, a new leaf or shoot will come out of each one.

The Coliseum Ivy, *Linaria cymbalaria*, is beautiful when growing in a hanging pot at the window. It is easily raised from seed or cuttings.

The Ivy Geraniums are very desirable for house plants, both on account of their leaves and their flowers.

MRS. C. G. F.

THE DIAMOND GRAPE.

It pleases me to see, in the last number of your excellent MAGAZINE, the way in which you describe the above Grape. If your readers will refer back a year or two, they will see that our ideas agree on its merits.

The four white Grapes of recent introduction rank in quality, to my notion, as follows: First, by far, Diamond; second, Empire State; third, Niagara; fourth, Pocklington. That they are all well worth growing for home use and market, I am satisfied. Diamond and Empire State for early; Pocklington and Niagara for late. The quality of Niagara, as grown here, is much better than those received from the north on different occasions. Woodruff Red is much less foxy than I expected, and, as grown here, I call it good.

A few words as to the Diamond. I consider it, to-day, the finest white, hardy Grape in this country. Those who have a vineyard of Concords, the fruit of which brings them three cents per pound, would make a nice thing of it by grafting it over with some of the above, the Diamond in particular.

SAMUEL MILLER, *Bluffton, Mo.*

N. Y. EXPERIMENT STATION.

Dr. PETER COLLIER has been appointed to the directorship of the New York Experiment Station at Geneva. This position was formerly occupied by Dr. STURTEVANT, who resigned it some months since.

A NEW IVY-LEAVED GERANIUM

The Ivy-leaved varieties of *Pelargonium* are among the handsomest and most useful plants for baskets and vases. Their half-trailing habit, clean, glossy leaves and bright flowers make them very prominent for the purposes mentioned, and florists are bringing out, from time to time, new varieties; these are already so



IVY-LEAVED PELARGONIUM MADAME THIBAUT.

numerous as to present a wide range in colors of flowers, which are both single and double, and there is also considerable variation in forms of leaves and appearance of leaf surface. One of the best of the new varieties of these plants is Madame Thibaut. The flowers are very large and full, of perfectly symmetrical form, resembling little Roses, and borne in large trusses. The color is a rich, deep pink; a very free grower and bloomer, producing flowers at every joint. It is acceded by all florists to be the greatest advance ever made in this class of plants.

TUBEROSE BULBS.

My experience with Tuberoses is contrary to that of horticultural writers generally, and for that reason I tell it. Last fall I had a few bulbs which, when I took them up, after flowering, looked fine and plump; so, instead of throwing them away, I kept them in a warm, dry place, leaving a little piece of the old stem attached, as a mark. In spring the bulb had formed a new center, the old stem being off at one side, just like that of a Lily. After removing the off-shoots, I planted them. This lot flowered quite as well as new bulbs planted beside them; one bulb sent up three spikes of

flowers. They were planted in a warm, dry, sandy spot with southern exposure; the only difference in the appearance of the bulbs that I could perceive was a greater breadth of the base where I cut off the old roots before planting. I intend planting the same bulbs again and watch results.

SAMUEL HUNTER, *Hartly, Del.*

FIGHTING SPARROWS.

Am glad to see your MAGAZINE fights the Sparrow; we must get him under I drive him out of my vineyard with a kettle of meal mixed with Paris green.

E. P. P., *Clinton, N. Y.*

GARDEN PRIZES.

The Massachusetts Horticultural Society is becoming more and more national in its influence by admitting to competition for its prizes "all persons residing in the United States." Thus, not even membership is required of exhibitors. The list of prizes for flowering bulbs in the spring of 1888 was received too late for publication in November, but is yet in good time for those who are already cultivating bulbs. The exact date of the spring exhibition cannot now be exactly fixed, but it will be about the 21st of March, and will be announced later. At that time the following special prizes will be offered by the Royal Union of Holland for the promotion of the cultivation of bulbs:

Hyacinths.—Fifty named bulbs in fifty pots, in bloom, not more than two pots of one variety: first prize, gold medal; second prize, silver gilt medal; third prize, silver medal.

Tulips—Single Early.—Twenty-five pots, in twenty-five distinct varieties, three bulbs of the same variety in a pot, in bloom: first prize, silver gilt medal; second prize, silver medal; third prize, bronze medal.

Polyanthus Narcissus — Narcissus Tazetta, or Bunch Flowered.—Twenty pots, three bulbs of the same variety in a pot, not more than two pots of one variety. It should be particularly understood that these prizes are intended for Polyanthus Narcissus only, and no others. First prize, gold medal; second prize, silver gilt medal; third prize, silver medal.

The prizes named below are offered directly by the Massachusetts Horticultural Society:

Hyacinths.—Twelve distinct named varieties in pots, one in each pot, in bloom, three prizes, \$10, \$8, \$6.

Six distinct named varieties in pots, one in each pot, in bloom, three prizes, \$6, \$5, \$4.

Three distinct named varieties in pots, one in each pot, in bloom, three prizes, \$4, \$3, \$2.

Single named bulb, in pot, in bloom, two prizes, \$2, \$1.

Three pans, ten bulbs of one variety in each pan, three prizes, \$10, \$8, \$6.

Two pans, ten bulbs of one variety in each pan, three prizes, \$8, \$6, \$5.

Single pan, with ten bulbs of one variety, three prizes, \$5, \$4, \$3.

Tulips.—Six six-inch pots, five bulbs in each, in bloom, three prizes, \$5, \$4, \$3.

Three six-inch pots, five bulbs in each, in bloom, three prizes, \$4, \$3, \$2.

Three pans, ten bulbs of one variety in each pan, four prizes, \$6, \$5, \$4, \$3.

Polyanthus Narcissus. — Four seven-inch pots, three bulbs in each, in bloom, three prizes, \$6, \$4, \$3.

Hardy Narcissus and Daffodils.—Twelve pots, not less than six varieties, three prizes, \$10, \$8, \$6.

Jonquils.—Four six-inch pots, six bulbs in each, in bloom, two prizes, \$3, \$2.

General Display of Spring Bulbs.—All classes, four prizes, \$20, \$18, \$15, \$10.

Lilium longiflorum or Harrisi.—Three pots, not exceeding ten inches, three prizes, \$8, \$6, \$5.

Lily of the Valley.—Six-inch pots, in bloom, three prizes, \$5, \$4, \$3.

Anemones.—Three pots or pans, two prizes, \$4, \$3.

Freesias.—Six pots, three prizes, \$5, \$4, \$3.

Milla biflora.—Two pots, two prizes, \$3, \$2.

NEW VARIETIES OF ROSES.

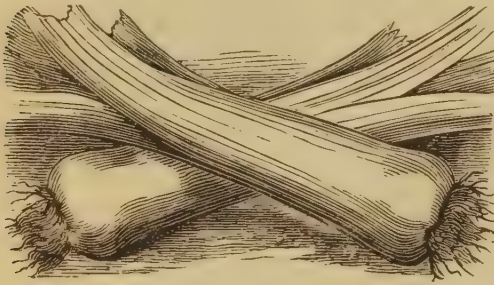
Among the new varieties of Roses to be sent out next spring will be the Duchess of Albany, a Hybrid Perpetual, originated by the famous English Rose-growers, WILLIAM PAUL & SON. They describe this Rose as "in the way of La France, but deeper in color, more expanded in form, and larger in size. The flowers are deep, even pink, very large and full, highly perfumed, and in all respects of first quality. The growth of the plant is exceedingly vigorous, the habit is good, and the flowers, which are thrown well up above the foliage, are produced in extraordinary profusion; the plants, during the past very dry summer, having been continually covered with handsome blooms, whilst other Roses around them were denuded of their blossoms by drought."

Two other new varieties of Hybrid Perpetuals which have been sent out this year by the same firm, are Grand Mogul and Silver Queen. In the language of the growers, the "Grand Mogul is a seedling from A. K. Williams, producing flowers of a deep and brilliant crimson, shaded with scarlet and black; in dull weather and late in summer the flowers are darker, approaching to maroon. They are large, full, of perfectly symmetrical shape, and produced in great profusion. The growth is vigorous and the foliage is large and massive. This Rose has received a first-class certificate from the Royal Horticultural Society, being the only English Rose which has gained this distinction in 1886." The London *Garden* thinks it is sure to become as popular as A. K. Williams.

The flowers of Silver Queen are described as silvery blush in color, shaded in the center with very delicate rosy pink; very distinct and lovely. They are large and full, of beautifully cupped form, and produced in great abundance, every shoot being crowned with a flower bud. The latter characteristic renders it also a fine autumnal bloomer. The growth is vigorous, foliage handsome, and the habit is unusually good, the flowers standing well above the foliage.

RAISING LEEKS.

Leeks, by some, are much preferred to Onions on account of their mild flavor when used in soups and stews. They are also eaten boiled and served as Asparagus. I suppose that many think they know how to grow Leeks, but in very few gardens can they be found in perfection. There are two methods of cultivating Leeks. One is to sow the seeds in a seed-bed early in the spring. As soon as the plants reach a height of four or five inches transplant them into



very rich, deep soil, placing them in rows two feet apart, the plants standing eight or ten inches apart. In transplanting select moist or showery weather, or plant just before, or after, rain. Use a dibble, plant deep, close up to the neck, so that they may become blanched by being covered with earth, but do not cover the center leaves. Draw earth up to the necks as often as necessary, in order to blanch them, and rub off the tops of the leaves about once a month. By this treatment the leaves will swell to a much larger size.

Another method is to sow the seed early in the spring, in rows not less than two feet apart, the soil being made deep and rich. When well up, thin them out to about four inches apart, and gradually draw earth up to them as they grow. This is the method generally adopted, but I would advise all who can to follow the former, as the transplanted Leeks always produce the finest roots. In the fall, before severe weather sets in, take them up and store in a cool cellar, placing the roots in either sand or earth.

An ounce of seed will produce about two thousand plants. Of the several varieties in cultivation, the following are the most desirable:

Broad London Flag. This is the variety most generally cultivated, with broad leaves which grow on one side only.

Large Rouen is a variety largely grown in the vicinity of Paris. It has a short, thick stem and dark green leaves, and is highly prized for forcing.

CHAS. E. PARNELL, *Queens, N. Y.*

TUBEROSE BULBS.

It is generally supposed that a Tuberose bulb which has blossomed is worthless. It is true that, at the North, such bulbs will not flower the next season, as do bulbs of Tulips, Hyacinths, &c. Nevertheless, if the owner wishes to propagate Tuberose bulbs for future bloom, the old bulb is very valuable. A Tuberose bulb never blooms a second time. In this State we have a long growing season, and Tuberose bulbs may safely be planted in the open ground by the first of March. If good sized bulbs, they will probably bloom in May or early in June.

If left undisturbed through the summer, a second flower stalk will often be seen coming up in November or December. This assertion looks like a flat contradiction of what I said a few lines back; but it is not. If the bulb with the second flower-stalk is dug, it will be found that the old bulb has entirely disappeared; the first flower-stalk occupies an empty space in a circle of new bulbs, from one of which the new flower stalk is seen to be growing.

Often none of the new bulbs develop quite far enough to bloom the same year. In that case, when the clump is dug in the fall, it will be found to consist of two or more fair sized bulbs and numerous sets surrounding an empty space where was the old bulb.

The bulbs that have bloomed at the North, if kept in a warm, dry place, may be planted out by the next spring, and by fall will have made numerous small bulbs, which may bloom the second year, or may require another season's growth.

I have heard it said that the bulbs of the variegated-leaved Tuberose would flower a second time. Such is not the case; they do not differ at all from the other varieties in this respect, but as they develop somewhat more rapidly and bloom at a smaller size, it is easy to see how the impression has arisen that the same bulb lived over and flowered again the second year.

W C. STEELE, *Switzerland, Fla.*

CUT-FLOWERS IN PARIS.

The constant demand for floral ornaments for house decoration has caused Parisian florists to demand of artists original designs for salon, vestibule and window. Rubber trees and large and graceful Palms placed in corners no longer please the fashionable hostess, and groups of graceful flowers, fastidiously designed, novel



and striking, win admiration from the appreciative guest, and add to welcome in many a fall Violet and rich hued Pensée.

Dahlias no longer are confined to garden space, but rich masses from pink to scarlet, yellow to almost brown, hide some angular space, and do not drop their heads with gas light or heat. Gladiolus blooms of the most delicate hue grace the church altar, but rarely the salon.

The enclosed sketch was taken from the exhibition of fall plants at the Palais de l'Industrie and was intended as a window-piece.

The Pensées were of the new shade of violet-purple, for no longer

is the beautiful flower reserved especially for funeral wreaths and loving tributes to the dead, but they grace many a corbeille of affection, so skilfully arranged one can almost read the thought of the giver in every bloom.

The most striking floral pieces for dinner or supper tables are tambourines, fans, half crescents, drums, upturned baskets, miniature parasols, which hang to the gas fixtures, and make a veritable center-piece of resistance. The tiny flowers, the very smallest of which would not find their place elsewhere, are used, and soft mosses take the place of leaves to bring out the effect of every tint. Chrysanthemums of every hue, in large masses ornament the parks or flower garden beds in well drilled rows. The hatchet or Dalmatian fan is ornamented with bows of crimson ribbon and Jacqueminot Roses, the invention of the Parisian florist. Fall Violets form the fashionable breast-knot, or corsage-knot, for they are worn at the right hand side of the corsage. Why? Fashion decrees it.

Gilded cages containing three doves each corner of doors, the cage adorned with a huge pale blue bow studded with silvery tinted grasses, attracted general admiration, and was destined for a gift of welcome to an American cantatrice. Each month new floral novelties appear. Sheaves of Roses tied round with their natural stems, in imitation of sheaves of Corn, make a pretty show on a dinner table, and the design is a novelty.

A. LOFTUS.

RETURNING THE MAGAZINE.

Our subscribers who intend to return the numbers of the MAGAZINE for binding should be particular to wrap them in plain paper and to write on the package only our address, and in one corner their own address preceded by the word from. If a single word of printing or writing more is found on the package it will be subjected to letter postage. This is in accordance with a late ruling of the Post

Office Department. We have already received some packages of back numbers on which extra postage to the amount of forty-three cents has been charged.

LOST NUMBERS.

If any number has failed to reach any subscriber during the year, and the volume is thus incomplete, please send us a postal card, stating what number you need, and it shall be forwarded.

POSTAL IMPROVEMENT.

The United States Postal Improvement Association is a name which indicates the object of the organization bearing it. But, to particularize, the objects of the Association are to secure from Congress,

1. A reduction in the postage on seeds, bulbs, plants and cions.
2. A re-issue of fractional currency, for use in the mails.
3. Abolition of the present unsafe and inconvenient postal notes.
4. Provision for the issuance of postal money orders in sums of \$5 or less for a fee of three cents.
5. Any other proper measures designed to enhance the usefulness of the postal service without too much expense to the government.

Seeds, plants, bulbs and cions are now classed as fourth-class mail matter, and cost one cent per ounce for postage, or sixteen cents per pound. The postal law should be amended so as to place these articles in the third-class, thus reducing the postage to one cent for each two ounces, or eight cents per pound. The present rate imposes a heavy tax on seed buyers, and is greatly to the advantage of the express companies. The express companies have always resisted efforts to reduce postage on these articles, and so far with success. Now, since the post office department is nearly self-sustaining, the government can well afford this reduction. It would greatly promote the dissemination of new, improved and valuable varieties of plants among the people. This would add greatly to the wealth and resources of the country, and to the happiness and health of the people. The increased business that would follow this reduction would compensate the government for the loss of revenue incurred, if, indeed, it did not produce a surplus.

As to fractional currency, it is needed for a thousand and one daily uses. It is wanted particularly for sending in the mails. The postal note does not accommodate people. It is no safer than fractional currency, is expensive, exceedingly inconvenient to get or to collect, and is issued only at money order offices. Now as only 14 per cent. of the post offices issue money orders or postal notes, and these only at important centers, it will be seen that people remote from

these centers, who most need the conveniences, have no way of sending money by mail except in postage stamps or bulky silver. Stamps were not made for this purpose and are not negotiable, Silver is too unsafe. Give us a fractional currency and abolish the postal notes.

The fee for small money orders should not be more than three cents, and then the public generally will be accommodated.

The President of the Association is WILLIAM PENN NIXON, the well known publisher of the Chicago *Inter Ocean*, whose efforts in previous postal reforms have been very successful. The first Vice Presidents include Mr. F. G. PRATT, of PERRY MASON & Co., publishers of the *Youth's Companion*, at Boston; Hon. MORTIMER WHITEHEAD, of Middlebush, N. J., Lecturer of the National Grange; J. S. CROWELL, Esq., of MAST, CROWELL & KIRKPATRICK, publishers of the well known *Farm and Fireside*, of Springfield, Ohio; Hon. C. W. MACUNE, of Cameron, Texas, President of the National Farmers' Alliance and Co-operative Union of America, with its membership including one million farmers; Hon. E. G. HILL, of Richmond, Indiana, President of the Society of American Florists. The Secretary is Mr. HERBERT MYRICK, of Springfield, Massachusetts, agricultural editor of *Farm and Home*. The Treasurer is JAMES VICK, the seedsman, of Rochester, N. Y., who is Chairman of the Postage Committee of the American Seed Trade Association. The foregoing comprise the Executive Committee, with Hon. J. J. HARRISON, of the STORRS & HARRISON COMPANY, of Painesville, Ohio, who is Chairman of the Postage Committee of the American Nurserymen's Association.

Every one is interested in this question of cheaper postage on the articles above specified, and an effort should be made to effect a change in the law at the coming session of Congress. All possible proper influence should be brought to bear upon our national Senators and Representatives to take action in this matter.

CLOTH COVERS FOR MAGAZINE.

We will furnish elegant cloth covers for the MAGAZINE, to our subscribers, for 25 cents each, and prepay postage. Any bookbinder can put on these covers at a trifling expense.

CLOSE OF THE VOLUME.

With this number the present volume of the MAGAZINE, which is the tenth, is brought to a close. The founder of the MAGAZINE had in mind a publication which should interest and instruct the people on gardening subjects, and this it has been our constant aim to make it, by articles carefully prepared by experienced persons, and, also, by the recital by amateurs of accounts of their work and the successes and difficulties attending it. That the publication was a needed one at the time it was started, and that to this time it has accomplished the aim of its founder, there is abundant evidence. When the MAGAZINE was started the only other strictly horticultural journal in the country was the *Gardeners' Monthly*, which for many years has been ably edited by THOMAS MEEHAN, and has a subscription list largely composed of professional gardeners. During the past ten years several horticultural publications have been started, some of which are now flourishing, and others have been discontinued. In the meantime quite a number of writers on horticulture have gained facility with the pen, and receive the attention of the public. It is probable that both writers and readers of horticultural subjects are more numerous now in this country than in any other. Horticultural societies are increasing in number and gaining in membership. The rearing of plants, the cultivation of fruits and vegetables, and the planting of ornamental trees and shrubs is receiving more and more attention every year. The variety of information required on these subjects is very great, and can be supplied only by the regular and constant issues of reliable publications.

We take this occasion to publicly thank those contributors who occasionally or frequently have favored us with their writings, and to ask them to continue in the future to give their good thoughts to our readers, who will properly appreciate them, and by putting them in practice make the world so much the brighter and happier. We hope during the coming year to place before our readers a great variety of useful and pleasing matter, which can the more easily be done if each will contribute whatever new or good thing or thought, pertaining to the garden or growing world, may be brought

to notice. We should be mutually helpful, and thus the good we do will return to us in four-fold measure.

We trust all of our readers at this time will take occasion to mention the merits of the MAGAZINE to neighbors and help increase our subscription list. A little effort by each one will be a great help collectively, and we shall expect our present subscribers will promptly renew and send their friends' names along at the same time. Send us your subscription, and we will help you along from month to month through the whole year coming.

WILL YOU ACT AS AGENT?

We want agents everywhere to take subscriptions for us, and no one is better qualified for this purpose than one who is a regular reader of the MAGAZINE. Who will so act? We must have one agent at every post office. We do not offer premiums of this, that and the other for such service, but every one who will assist in getting subscribers will be liberally paid in cash, according to the amount of service. Send a letter or a postal card, and full information in regard to terms of agents will be returned, together with specimen copies, if desired. Now is the time to begin, delay will be loss. Please let us hear from you at once.

BINDING THE MAGAZINE.

We will bind the MAGAZINE in nice cloth covers, for any subscriber, for 50 cents, and return the book, with the postage or expressage prepaid by us. If subscribers will send us the eleven numbers in season, we will add the December number and have the volume bound and returned if possible before the Christmas holidays. Please give your name on the package when sent, so that we may know to whom it belongs.

SEND IN NAMES EARLY.

It will be a great convenience if our subscribers will renew their subscriptions and send in their clubs early. It will aid us very much in arranging our books, save a liability to mistakes and enable us to send the January number so that you will have it to read Christmas Day, or at least look at the pictures, if you are too happy to read.

OUR YOUNG PEOPLE.

A CHRISTMAS IN "ELDORADO."

"Lizzie! Lizzie Merton!" called the much-harassed mother of that girl, "it is time to be getting supper. Why do you keep yourself shut up every leisure moment lately! Have you been rummaging in my drawers again?"

"I have been looking for something I very much want," answered Lizzie, "but have not disordered your things."

"Well," retorted the mother, "there's nothing in my drawers you can have. I think it's come to a pretty pass if I've got to lock them to keep you out of them, as old as you are."

"Oh, mother," cried the girl, in tremulous tones, "I wonder when I shall ever get old enough so that you can trust me,"

Mrs. Merton looked a moment at her tall daughter, and a flash of thought seemed to transform her. Drawing Lizzie toward her and pressing her head against her breast, she said, "I can trust you now, daughter, can trust you fully. I have been 'forgetting to remember' that you are no longer the little Mischief that used always to watch for opportunities to ransack my drawers for my few laces and ribbons to wind around her pussy cat. I was so long on the defensive that it became a habit, and I have failed to realize, as soon as I ought to have done, that there is no longer any necessity for it."

Lizzie kissed her mother for thanks, and went blithely about her duties. Her home was on the outskirts of a far-western village. She could not remember the Indiana home which her parents had left for this remote Eldorado. Her father's farm, stretching away in the distance, lay along the line of the once prospective railway, which was never built, and the mushroom village that had suddenly sprung up had failed to enrich Mr. Merton through clamorous appeals for more town lots, as the representations of unscrupulous speculators at the time of his purchase had led him to believe would soon be the case. Instead of that, the frequent presence of drought or of

grasshoppers, and the absence of markets when crops were abundant, rendered it more difficult to pay the taxes on his many acres than it had been to raise the purchase money for the whole. The absence of all former ties and associations increased the general depression of the situation, until Mr. Merton had become possessed of a conviction, which he often expressed, that a man with family should never seek a home in a remote region unless a colony could be formed of old friends and neighbors, who would be united in the strange land by a common bond of sympathy and interest.

And now a wily plan had been laid to victimize Mr. Merton again. But of this he knew nothing.

Lizzie had often heard their situation discussed, and, being a wide-awake girl, had given the subject much thought. Having but few advantages for culture, she still saw no prospect of anything better, and wisely determined to make the most of every chance opening for self-improvement. Mrs. Easton, the pretty, Bostonian wife of the village minister, loaned her, each month, a "home" magazine, which was always blistered with home-sick tears, and an Indiana Aunt sent her a choice floral monthly, with beautiful colored plates, which was the delight of her heart.

From this limited reading, she gathered many new ideas, and finally found herself studying, not only the construction of striking sentences, but such variations of dialect embraced in the English language as came within her knowledge. She noticed that Mrs. Eaton clipped her r's as she inquired, "Is you-a moth-a betta this mo'ning?" and that when she had a splinter in her finger, she called it a "sliv-a," (sliver,) and if it were smutty with coal dirt, she said it was "crocked," and funniest of all, if her yeast bread failed her it was the fault of the "emptyin's"—a word whose derivation was a poser to Lizzie, as well it might be.

A wiry, pinched-looking Vermonter

had recently introduced a business call to her father, by remarking, "It's pooty consid'able cold this mornin'," and her Hoosier father had replied, "Yes, it's right smart colder than it was yesterday evening." Also a Maine man had lately dined with them, who pronounced heart, hearty, and start like hat, hatty, and stat, saying that he was not a very h'a'ty eater—that he'd been having some h'a't-trouble lately, and must soon sta't for hum (home). He owned several vessels, lived in a sea-port metropolis frequented by English craft, and Lizzie ceased to wonder why the English have made sport of the "Yankee dialect." But she did not understand why the former man continued to call at their house until she overheard him urging her father to join himself and others in forming a colony in some new railway center, which he mentioned, adding, that he had accidentally encountered an eastern man looking up land, who, he thought, would purchase her father's tract, and thus do away with his objection that there was no sale for his farm. It was immediately after this that the Maine man had called, finding much fault with the place and objecting to the price as exorbitant.

Mr. Merton and wife had been somewhat stirred by the prospect held before them of a new location, with the advantages they had sought for in the present one, but the indifference of the possible purchaser dispelled further thought on the subject.

Lizzie pondered on all she heard, drew her own conclusions, studied character and customs, made comparisons, and thus enlarged and improved her range of thought. So it naturally came about that on the last Christmas day she had resolved that its next return should find something more provided for her young brothers and sisters than the few nuts and bits of candy in their stockings, which they had learned to expect, and her parents, too, should be remembered. It made no difference about herself, she thought; her own happiness would be secured by giving those she best loved a pleasant surprise. With this feeling came another—that perhaps the love underlying her resolve was faintly typical of that other and greater love which had made the day a precious one to christian hearts.

So, with the meagre materials she could collect, she had occupied her leisure during the past year with unfaltering purpose, until, during certain stages of her work, the children had cried out, "Lizzie is making more wheels!" or, "Lizzie is making more balls!" though what the wheels and balls were for they grew tired of guessing. But the rest of us may as well know all about it, remembering, the while, that Lizzie's resources were very limited, and that she had received samples for this work from her Aunt.

The "wheels" were made of circular pieces, three inches in diameter, cut from scraps of bleached muslin—"cotten cloth," Mrs. Easton called it. The edges of these were folded down, then gathered on the right side and drawn up just enough to make the doubled edge of the "wheel" lie flat and smooth. When enough of these were made for a long tidy for a rocker they were sewed in rows, with the gathers on the right side, and the rows then joined. A very pretty and serviceable tidy was the result.

The "balls" were made by cutting circular pieces, the same size as the others, from worsted or woolen material, the raw edges gathered with strong thread, then stuffed tightly with cotton and the edges sewed firmly together. The balls were *flattened* and then sewed in rows so as to form a flat cushion for an old-fashioned arm-chair. A few bright colors were interspersed with plenty of drabs, browns, olives, grays and blacks, and when Lizzie contemplated the finished work, she knew it was pretty enough for anybody's sitting-room.

She had dressed dolls, made marble bags, school-book satchels, mittens, mufflers and paper-racks, until now it would soon be Christmas, and a cushion-cover of—it was the first poor Lizzie had made—crazy-patch-work, all of "real silk," for her mother, was nearly done. It lacked but two or three pieces more, and for these she had gone, in her desperation, to her mother's drawer—where we found her at the opening of our story—but could find nothing she dared appropriate.

We left her getting supper with a lighter heart than she had carried for many a day. Her mother trusted her—would trust her now always. She should have

more self-reliance from this time forward, but knew she should consult her mother more than ever, because being less subject to dictation and advice she should need the oftener to ask for counsel. O yes, she should continually need the benefit of her mother's long experience and matured judgment. But those precious words had made her happy.

When the supper was over, Lizzie decided to go to the village store for some bits of ribbon to finish her work. As she was passing the parsonage, Mrs. Easton called her in to get the last magazine, and tearfully showed her the presents she had been making for home friends. This delayed her somewhat, so that twilight had changed to dusk by the time she was ready to leave the store. Then, meeting a neighbor girl, also alone, Lizzie waited inside the door for her company home, and standing there, soon heard a recognized voice outside, in suppressed tones, stating to a second party that the speaker had just looked over his eastern mail, and had learned that the projected railroad, on the old line of survey, bounding "Eldorado" could no longer be kept secret—that it was already published in eastern papers—that Merton must be seen immediately, and his land purchased at once—that the fellow had been worked up to the selling point, and was now ready for a buyer—adding, to use his own vernacular, "Ever sense we be'n here I see there wa'n't no time to lose; I guess you'll find after a spell

that mebbly I know a little sunthin'. There wont be a spec o' time to ease down that colony business—it can go to thunder. We've got to git out o' here—and that pooty spry."

Lizzie's heart beat fast and faster as she listened. How she got home, in her excitement, she hardly knew. Panting and flushed, she managed to make her astonished parents understand what she had heard. Mr. Merton was appalled at such evidence of a deeply laid scheme to defraud him, by first trying to inspire him with a desire to go elsewhere, and then producing a buyer to enable him to do so, in order to possess themselves of land that would be worth ten times its present value. "And such knavery as this, when successful," said Mr. Merton, "is called by unscrupulous people 'a sharp stroke of business.' May I always be a poor man if I can win riches in no other way."

It may easily be supposed that Lizzie's coming Christmas was a happy one. Not for a moment did prospective affluence dwindle the value of her "love-gifts." She felt that a part of herself—of her life, as it had been—had gone into them, and was satisfied. She did not in the least suspect, however, that all her future life would be the more useful and noble for the very experiences which had sometimes seemed trials. But she did suspect, as she pressed her pillow that night, that she should never spend a happier Christmas.

MARIA BARRETT BUTLER.

WE GREET THEE, WINTER.

We greet thee, Winter! We are glad
To see thy snowy mantle spread
O'er river, lake and hill;
We're glad to hear the merry sounds
That tell us happiness abounds
Among sleigh-riders still.

We love thee, Winter! Thou dost bring
Upon thy cold and frosty wing
Much, much our hearts to glad;
And though thou'rt bleak, we'll not repine,
For springs of joyousness are thine
That Summer never had.

The Merry Christmas' noisy glee,
And New Years when each heart is free
From aught of pain or care,
And the long evening's cheerful mirth
Beside the wintry fireside hearth,
Loudly thy worth declare.

Then, hail thee, Winter! We will greet
Thy pleasures with a welcome meet,
And taste them while they stay;
And when thou'rt gone, and joyous Spring
Comes with her robes of blossoming,
We'll bid thee speed away.

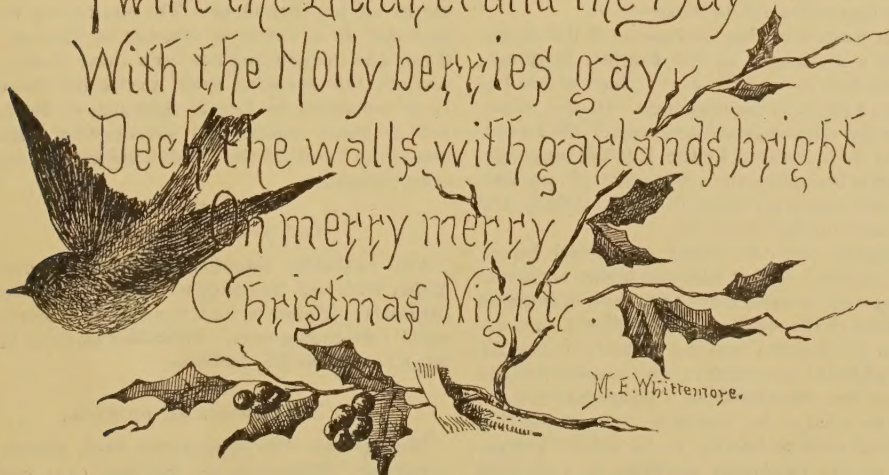
SOPHIA W. LLOYD.



MERRY Christmas!

Merry Christmas now is here,
 Brightest time of all the year,
 Gentle words and greetings gay
 From friend to friend
 On Christmas Day.

Twine the Laurel and the Bay
 With the Holly berries gay,
 Deck the walls with garlands bright
 On merry merry
 Christmas Night.



M. E. Whittimore.

EDITOR'S MISCELLANY.

NORTH AMERICAN BIRDS.

Ridgway's *Manual of North American Birds*, lately published by Lippincott & Company, is a work of the highest authority on the ornithology of this continent. The author, Robert Ridgway, is connected with the Department of Birds in the United States National Museum. The object of the present volume is to furnish a convenient manual of North American ornithology, reduced to the smallest compass by the omission of everything that is not absolutely necessary for determining the character of any given specimen.

The work was originally projected, and even begun, by the late Professor Spencer F. Baird, and based essentially upon the Grand National Cabinet of American Birds, but his great responsibilities and engrossing duties as Secretary of the Smithsonian Institute and Director of the United States National Museum, precluded the possibility of his continuing it, and consequently it was assigned to Mr. Ridgway. The author remarks that he has endeavored to fulfill his trust with careful attention to the hope of the originator that the *Manual* may serve as a handy book for the sportsman and traveler, as well as for the resident naturalist, and that all may find it a convenient and satisfactory means of identifying any North American bird in all variations of plumage. The work consists of 630 large octavo pages and 124 full pages of illustrative plates. The arrangement is such as to give the greatest facility in identifying specimens. The book is receiving the highest approval of the best naturalists. The cost of producing this book has been great, and it is to be hoped for the sake of the author and publisher as well as for the cause of science, that it may find a large sale.

ALDEN'S MANIFOLD CYCLOPEDIA.

The promise of a remarkably valuable work is given in the first two volumes which have now been issued of *Alden's Manifold Cyclopædia of Knowledge and Language*. The volumes will average about 640 pages each, and there will be about thirty of them in all. The lettering on the back of each volume shows at once what titles will be found within, and the volumes are so handy that one quickly turns to the desired page. There will be several thousand illustrations—no mere pictures, but everything of importance that will serve to illustrate.

A peculiar feature of this Cyclopædia is that it embodies, also, a dictionary of the English language, and is intended to include every word which has any claim to a place in the language. In the *Manifold Cyclopædia* will be found a survey of all knowledge, which is illustrated by the English language, and the cost is brought within the reach of any one, being only fifty cents a volume in cloth binding, and sixty-five cents for half morocco.

The publisher, John B. Alden, 393 Pearl Street, New York, informs us that editorial talent second to none in America, in experience and skill, is engaged in the conduct of the work; the publisher's past experience in Cyclopædia making (notably in the *Library of Universal Knowledge*, now known—trebled in price—as the *International Cyclopædia*) is good basis for the pledge he makes to his patrons that *The Manifold* shall be inferior to no other Cyclopædia in any of the important qualities of a popular guide to knowledge. Specimen pages free, or a specimen volume may be ordered, and returned if not wanted.

DRUGS AND MEDICINES OF NORTH AMERICA.

Number four of the second volume of this able publication has been duly received. In this number, which is fully illustrated, there are accurate botanical descriptions, and statements of chemical investigations with their results, and the medical properties and medical histories of the following plants: *Lobelia syphilitica*, *L. cardinalis*, *Schrophularia nodosa*, *Diphylleia cymosa*, *Lindera Benzoin*, *Cercis Canadensis* and *Erechtites hieracifolia*. The work bears the marks of faithfulness and ability in every part, as it has from its commencement. It supplies a fund of knowledge hitherto lacking, and should receive the attention and support of all physicians, chemists and druggists. To the botanist it gives a great variety of accurate and special information relating to the different parts of plants under notice. Four numbers are issued in a year, at \$1.00. Published by J. N. & C. G. Lloyd, Cincinnati, Ohio.

WE'LL GREET THEE, WINTER.

The little poem with above title, in Our Young People's department, is taken from a small volume of poems by Sophia W. Lloyd, lately published for private circulation, by Lloyd Brothers, of Cincinnati, Ohio, who inform us that the authoress is their mother, a native of the Genesee valley, and who "considers Rochester her homeland."

The poems, written from time to time during the past fifty years, and some of them having appeared in local prints, are here collected in permanent form "to gratify the partiality of the best children that ever blessed a mother's care." All of these poems are pleasing and ennobling in sentiment, and most of them show true poetic feeling and expression. Lloyd Brothers will please accept our congratulations in having so good a mother, and the mother in having sons who are an honor to her.

A BUNCH OF VIOLETS.

This is another new volume of beautiful sketches and sentiment which Irene E. Jerome annually prepares with so much artistic skill and poetic taste. The subject is the Violet, and is illustrated in twenty-two quarto-sized plates.

Those who are acquainted with Miss Jerome's productions do not need to be informed of the great merits of her drawings. The engraving has been executed in a masterly manner by George T. Andrew, and the printing has been done under his direction, thus securing great perfection throughout. It is published by Lee & Shepard, of Boston, and sold at three dollars and seventy-five cents. It is one of the finest of the holiday books, and must find many admirers.

THE BOTANICAL GAZETTE.

This valuable monthly publication increases in ability with age, and is deserving of patronage by all botanists. It aims to be a "mirror of American botany." Price \$2 a year. Published by John M. Coulter, Crawfordsville, Indiana.

MICROSCOPICAL JOURNAL.

We welcome the appearance each month of the *American Microscopical Journal*, as containing much that is of interest and value to the student of nature. Published at Washington, D C., at \$1 a year. Address of Business Manager, Box 630.

